This book is dedicated to . . .

• Ann Bourke Fives, Rennae Kimbrough, and Patricia A. Alexander, mother, colleague, advisor; the mentors who shaped my development and expanded my beliefs. HF

• Pat Ashton, who advised me, oh so gently, to not seek premature closure to my questions, and whose generous mentoring formed my wild scholar’s heart. MGG
CONTENTS

Acknowledgments xi

Chapter 1 Introduction 1
MICHELE GREGOIRE GILL AND HELEN ROSE FIVES

Section I FOUNDATIONS OF TEACHERS’ BELIEFS RESEARCH 11

Chapter 2 The Promises, Problems, and Prospects of Research on Teachers' Beliefs 13
JEFFREY S. KOTT

Chapter 3 Historical Overview and Theoretical Perspectives of Research on Teachers' Beliefs 31
PATRICIA T. ASHTON

Chapter 4 The Development of Teachers' Beliefs 48
BARRA B. LEVIN

Chapter 5 The Relationship Between Teachers' Beliefs and Teachers' Practices 66
MICHELLE M. RUEHL AND JORI S. BECK

Section II STUDYING TEACHERS’ BELIEFS 85

Chapter 6 Assessing Teachers' Beliefs: Challenges and Solutions 87
GREGORY SCHRAW AND LORI OLAFSON

vii
Chapter 7  Measuring Teachers' Beliefs: For What Purpose?  
BOBBY H. HOFFMAN AND KATRIN SEIDEL  
106

Chapter 8  Qualitative Approaches to Studying Teachers' Beliefs  
LOKI OLASON, CRISTINA SALINAS GRANDY, AND MARISSA C. OWENS  
128

Chapter 9  Methods for Studying Beliefs: Teacher Writing, Scenarios, and Metaphor Analysis  
ROBERT V. BULLOUGH, JR.  
150

Section III  TEACHERS’ IDENTITY, MOTIVATION, AND AFFECT  
171

Chapter 10  The Intersection of Identity, Beliefs, and Politics in Conceptualizing "Teacher Identity"  
MICHALINOS ZEMBYLAS AND SHARON M. CHURBUCK  
173

Chapter 11  A Motivational Analysis of Teachers' Beliefs  
HELEN M. G. WATT AND PAUL W. RICHARDSON  
191

Chapter 12  The Career Development of Preservice and Inservice Teachers: Why Teachers' Self-Efficacy Beliefs Matter  
KAMAU OGINGA SIWATU AND STEVEN RANDALL CHESNUT  
212

Chapter 13  A "Hot" Mess: Unpacking the Relation Between Teachers’ Beliefs and Emotions  
MICHELE GREGOIRE GILL AND CHRISTINA HARDIN  
230

Section IV  CONTEXTS AND TEACHERS' BELIEFS  
247

Chapter 14  Teachers' Beliefs About Teaching (and Learning)  
HELEN ROSE FIVES, NATALIE LACATERA, AND LAURA GERARD  
249

Chapter 15  Teachers' Instructional Beliefs and the Classroom Climate: Connections and Conundrums  
CHRISTINE RUBIE-DAVIES  
266

Chapter 16  Teachers' Beliefs About Assessment  
NICOLE BARNES, HELEN ROSE FIVES, AND CHARITY M. DACEY  
284

Chapter 17  Context Matters: The Influence of Collective Beliefs and Shared Norms  
Megan Tschannen-Moran, Serena J. Salloum, and Roger D. Goddard  
301

Section V  TEACHERS’ BELIEFS ABOUT KNOWING AND TEACHING WITHIN ACADEMIC DOMAINS  
317

Chapter 18  Personal Epistemologies and Teaching  
JO LUNN, SUE WALKER, AND JULIA MASCARO  
319

Chapter 19  The Individual, the Context, and Practice: A Review of the Research on Teachers’ Beliefs Related to Mathematics  
DIONNE CROSS FRANCIS, LAUREN RAPACKI, AND AYBER EKER  
336

Chapter 20  Beliefs About Reading, Text, and Learning From Text  
LILIANA MACHONI, EMILY FOX, AND PATRICIA A. ALEXANDER  
353

Chapter 21  Science Teachers’ Beliefs: Perceptions of Efficacy and the Nature of Scientific Knowledge and Knowing  
JASON A. CHEN, DAVID B. MORRIS, AND NASSER MANSOUR  
370

Chapter 22  Teachers’ Beliefs About Social Studies  
CARLA L. PECK AND LINDSAY HERBLOT  
387

Chapter 23  Teachers’ Beliefs and Uses of Technology to Support 21st-century Teaching and Learning  
Peggy A. BRTME, Anne T. OTTENBREIT-LEFTWICH, and JO TONDEUR  
403

Section VI  TEACHERS’ BELIEFS ABOUT LEARNERS  
419

Chapter 24  Preschool Teachers’ Ideas about How Children Learn Best: An Examination of Beliefs about the Principles of Developmentally Appropriate Practice  
AMANDA S. WILCOX-HERZOG, SHARON L. WARD, EUGENE H. WONG, AND MERIDETH S. MCLAREN  
421

Chapter 25  Teachers’ Beliefs About Cultural Diversity: Problems and Possibilities  
GENEVA GAY  
436

Chapter 26  Teachers’ Beliefs About English Language Learners  
TAMARA LUCAS, ANA MARIA VALLEGAS, AND ADRIAN D. MARTIN  
453
First, we both want to send forth our appreciation to Patricia Alexander for giving us this opportunity to gather the leading thinkers and researchers on teachers' beliefs in one volume. Patricia, you gave us permission to play in our favorite playground and be able to share our passionate interest with others. Thank you! You have been such a wonderful, supportive mentor to us both.

We also want to thank all of the authors who agreed to write these chapters. Each chapter was a serious undertaking with varied challenges from fields with enormous amounts of literature to review to fields with little work across scattered topics. The thoughtful scholarship presented in this Handbook will serve to guide this body of research. Thank you for lending your voices to this work.

We are particularly indebted to our reviewers, leading experts in the various domains of research on teachers' beliefs, who accepted our invitation to review their assigned chapter with eagerness and a quick turnaround. Your efforts helped our authors with their revisions and provided a much needed "outside" lens for us to consider each chapter as a whole.

Finally, thank you to all researchers on teachers' beliefs, past and present, for laboring away at this messy, complex topic. Without your research efforts, there would not be a Handbook to write.

HR: This work is dedicated to three women who have mentored me throughout my personal and professional life: Ann Bourke Fives, Rennae Kimbrough, and Patricia A. Alexander. Ann Bourke Fives, my mother who I can never thank enough gives me unending support and clear direction. When I considered getting a second masters' degree her response was “No, Lovey, you have one of those, now you get a doctorate.” So I did. Rennae Kimbrough, my mentor during my first years of classroom teaching, modeled for me time and again how to teach and reminded me always of the magic that can happen at the chalkboard. Patricia Alexander my advisor and mentor continues to push me farther than I ever intend to go. When I asked for advice on developing a small edited volume her response was “You'll do a Handbook on Teacher Beliefs.” And so I did. I am grateful to the ongoing support of colleagues, friends, and family, especially Michelle M. Buehl, Emily Klein, Nicole Barnes, and Maribeth Ellen


---

A MOTIVATIONAL ANALYSIS OF TEACHERS’ BELIEFS

_Helen M. G. Watt and Paul W. Richardson, Monash University, AU_

---

**Authors' Note:**

The FIT-Choice project (www.fitchoice.org) is supported by sequential Australian Research Council Discovery Projects DP140100402 (2014–2016; Richardson & Watt), DP0987614 (2009–2012; Watt & Richardson) and DP066253 (2006–2009; Richardson, Watt, & Eccles). The authors contributed equally to this chapter.

Beliefs (and values) are implicated in all aspects of our lives. Beliefs influence how we attend, interpret, and respond to events and those involved in them, by functioning as "filters," "frames," and "guides" (Fives & Buell, 2012). From the perspective of contemporary analytical philosophy "belief" refers to a mental attitude that some proposition, statement, idea, or fact is true. Beliefs can be both explicitly available for review and reflection and implicitly held and are related to, but distinct from, knowledge (see Schwitzgebel, 2011). Beliefs are the convictions that we generally hold to be true, often without actual proof or evidence. From among the vast array of things individuals believe at any one point in time, only a limited number can be at the fore and available for reflection, thus, we are not necessarily consciously aware of; nor do we actively reflect upon, many of our beliefs.

Psychologists have taken an interest in beliefs which are seen as "underlying states of expectancy" (Rokeach, 1968, p. 2) that guide attitudes, expectations, and specific values; are instrumental in defining behavior; and are implicated in actions and decision making. Beliefs are assumptions that we make about the world, and our values (i.e., what we deem to be important) relate to those beliefs. For example, an individual could believe that all people are created equal. Such a belief would lead to behaviors and attitudes such as treating everyone with respect regardless of sex, race, religion, age, education, or social status. An opposing belief would likely produce discriminatory behaviors and attitudes, such as racism or sexism. Each of us holds a myriad of beliefs about social and physical reality, organized psychologically
but not necessarily represented in a logical form (Rokeach, 1968). Beliefs vary in their centrality; the more central a belief, the more resistant it is to change. Conceptual change is influenced by values, motivations, emotions, and other "hot" factors (Pintrich, Marx, & Boyle, 1993). Changes in central beliefs result in changes to the belief system including changes to more peripheral beliefs (Rokeach, 1968).

Central teachers' beliefs are those that focus on professional attitudes about education, teaching, and learning; of course, teachers also hold beliefs that are peripheral or unrelated to teaching. Teachers' beliefs can be explicitly or implicitly held, are strongly and positively interrelated (Pohan & Aguilar, 2001), predict teaching practice and pedagogy (Nespor, 1987; Pajares, 1992; Richardson, 1996), relate to teaching preparation and effectiveness (Mewborn, 2002; Nespor, 1987; Ruddell & Kern, 1986), as well as student outcomes (Kanter, Klusmann, Baumert, Richter, Voss, & Hachfeld, 2013). There is a large body of research concerning the powerful effects of teachers' beliefs for their students' achievements in particular, which affect students' perceptions of competence, learning, and achievement. These beliefs, often communicated nonverbally and unintentionally, are perceived and internalized by students, with direct consequences for their self-efficacy, motivation, effort, and achievement (Rosenthal, 2002). Implicit teachers' beliefs also have an effect; in the Netherlands elementary school teachers' implicit prejudices toward ethnic minority students as less intelligent and with poorer school career prospects explained ethnic achievement gaps (van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010).

Although beliefs and values both constitute fundamental and underlying bases for attitudes and behaviors, values, to this point, have not been comprehensively examined in relation to teachers. Core values have been identified and defined as individuals' conceptions of what is desirable; values influence how people act and how they appraise the events they experience (Schwartz, 1992, 1994). Ten "universal" values have been proposed from empirical research conducted in 20 countries (Schwartz, 1992, 1994): power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These basic values are likely to underpin more domain-specific values, which act in concert with teachers' beliefs, to shape teachers' choices, behaviors, and commitment.

Theories of motivation incorporate domain-specific dual belief and value components. The word "motivation" has its origins in the Latin verb movere, meaning "to move," so that motivation is the study of what moves people to action. Theories of motivation were developed to understand what energizes individuals to engage in tasks (Pintrich & Schunk, 2002) and have been developed in relation to students rather than teachers. This situation changed somewhat over the last decade, as motivation researchers have turned their attention also to teachers. In this chapter, we begin with an overview of each of three major motivation theories—expectancy-value, achievement goal, and self-determination theories—which have thus far been reinterpreted in relation to teachers. This reinterpretation has involved the adaptation of constructs and processes initially designed to understand students' motivations. We next review empirical findings pertaining to teachers' motivations and explore cultural differences where these have been identified, paying particular attention to expectancy-value theory within which our work has concentrated. Finally, we raise some methodological issues and conclude with implications for policy and practice, and suggestions for future research in the field. The relevance and role of beliefs in relation to the study of teacher motivations is highlighted throughout.

**HOW CAN A MOTIVATIONAL LENS ADD TO OUR UNDERSTANDING OF TEACHERS' BELIEFS?**

Modern motivation theorists have focused on the interrelationships of beliefs, values, and goals with action to engage in tasks (Eccles & Wigfield, 2002). Self-related beliefs such as self-efficacy, competence, or ability, figure prominently as inherent components in motivational frameworks. Teachers' self-related beliefs have been extensively examined in the teacher self-efficacy literature, which has made important contributions to the study of teachers' beliefs for some time (e.g., Tschannen-Moran & Woolfolk Hoy, 2007; Woolfolk Hoy & Burge-Spero, 2005).

Teacher self-efficacy refers to the degree to which teachers believe they are able or feel efficacious to enact certain professional outcomes—such as deploying effective instructional strategies, classroom management, and engaging students (Tschannen-Moran & Woolfolk Hoy, 2001). In general, empirical studies have demonstrated that higher self-efficacy relates to many positive attitudes and behaviors for teachers and students (see Shiaw & Chesnut, Chapter 12, this volume). These include better or more innovative teaching strategies; greater task persistence, resilience, and well-being; and enhanced student motivation and achievement (see Klassen, Tse, Betts, & Gordon, 2011; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Constructs which are conceptually related to self-efficacy (such as success expectancies) are important components within broader motivational theories, which incorporate additional values components and antecedent socialization influences, thereby providing larger frameworks within which to study correlates, antecedents, and consequences of teacher self-beliefs.

In expectancy-value theory (EVT; Eccles [Parsons] et al., 1983; Eccles, 2005, 2009), beliefs about the self, in terms of ability and expectancy of success (closely related to self-efficacy and self-concept), are posited to combine with different kinds of values in predicting a range of achievement behaviors such as participation, effort, and persistence. In self-determination theory (SDT; Deci & Ryan, 2000), a belief in one's own competence is considered a basic need underpinning the progression from controlled to autonomous motivation. While not explicitly a factor within achievement goal theory (AGT), self-beliefs of ability are implicated in the adoption and consequences of performance/ego versus mastery/task goals. Those who adopt performance goals are motivated to demonstrate superior ability relative to others, or to avoid the demonstration of perceived inferior abilities; this is in contrast to mastery goals which individuals adopt when they are motivated to focus on tasks for intrinsic reasons such as interest.

The study of teachers' motivations is not in itself a new question; however, research concerning teachers' motivations has, until recently, not drawn upon the motivation literature in an intensive or systematic way. Theories, constructs, and concepts developed in the student motivation literature are now being fruitfully applied to the study of teacher motivation. Motivation researchers are beginning to turn their attention to other aspects of the complex of motivational factors that
demand greater attention and exploration in relation to teachers. In this endeavor, they have extrapolated from well-established motivation theories to ask, first, what kinds of expectancies, values, and goals are relevant for teachers; second, whether and how we can measure them; and third, whether and how they matter, for teachers, students, and schools.

The burgeoning field of teacher motivation research has begun to demonstrate the importance of teachers’ motivations for both themselves and their students. Transposing theoretical concepts to the hitherto neglected domain of teaching has required the adaptation and development of theories which were not originally developed to apply to teachers. We have elsewhere described this movement as a “Zeitgeist” (Watt & Richardson, 2008a), in developing theoretically grounded and psychometrically strong approaches to examine teaching motivations within a range of settings. This emergent teacher motivation literature has originated and developed rather separately from the literature concerning teachers’ beliefs. However, it is timely to consider what each has in common and ways in which productive cross-fertilization may occur. The theories which have so far been interpreted are expectancy-value theory (EVT), achievement goal theory (AGT), and self-determination theory (SDT).

THEORIES OF TEACHER MOTIVATION

EVT, AGT, and SDT have recently been adapted to address pressing questions concerning teachers’ motivations for career entry and commitment, efforts and instructional behaviors, and growth and well-being. The choice of theoretical lens has depended upon the outcomes under investigation. We began our empirical work with EVT because it provided a clear articulation of the choice of teaching as a career at the initial stage in becoming a teacher. We have examined teaching career motivations from an EVT perspective to identify how individuals choose to pursue teaching as a career, and consequences for their professional engagement, teaching style, and personal well-being (Watt & Richardson, 2007, 2008b). AGT has focused on how teachers strive to feel successful in their daily work. From this perspective, Butler (2007) has demonstrated that the classroom is an achievement arena for teachers as well as students. In the adaptation and application of AGT, because teaching is an interpersonal activity (Butler, 2012), the focal outcomes have been dual, concerning both teachers’ development and students’ learning. Thus, Butler (2012) has introduced and established a new class of achievement goal for teachers: relational goals, which describe teacher strivings to create caring relationships with their students. SDT focuses more generally on growth and human functioning. Through this lens, teachers’ controlled versus autonomous motivations have been explored, and consequences for teachers’ quality instructional behaviors versus burnout, as well as for the quality of their students’ motivations (see Roth, in press, for a review). Teachers’ motivations matter, because if teachers are not able to realize their motivations in particular school contexts, it is likely that professional satisfaction and fulfillment will deteriorate.

Expectancy-Value Theory (EVT)

The expectancy-value model of Eccles and her colleagues (EVT; Eccles, 2005, 2009; Eccles [Parsons] et al., 1983) sets out the importance of individuals’ expectancies, values, and background socialization influences in shaping their achievement-related choices, over and above their demonstrated skills and abilities. Although developed as a framework to explain senior high school mathematics enrollments (Eccles [Parsons] et al., 1983), it has since fruitfully been applied to other academic school disciplines (for example, English and Language Arts [Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Watt, 2004]; and sport [Fredricks & Eccles, 2002]), as well as to specific types of careers (e.g., Watt, 2002, 2006; Watt et al., 2012). Expectancies refer to beliefs about how well an individual will perform on an impending task (Eccles [Parsons] et al., 1983), and are shaped over time by her or his experiences and interpretations of those experiences (see Eccles & Wigfield, 1995).

If someone performs a task successfully, she is likely to have her self-beliefs bolstered by the success and expect to succeed at similar tasks in the future; conversely for someone who experiences lack of success or failure. However, ability beliefs describe just one aspect of how individuals relate to tasks. It is also necessary to take into account the value that the individual places on a task. This is influenced by a number of dimensions: does the person enjoy the task? (intrinsic value); is the task instrumental for any of the person’s long- or short-term goals? (utility value); does she or he think the task is suited to people like her or him? (attainment value); and, will it be worth the effort required to be successful? (cost value).

EVT conceptualizes and organizes these four classes of values, which relate to how a task meets individual needs (Eccles [Parsons] et al., 1983; Wigfield & Eccles, 1992). Intrinsic value is the enjoyment one derives from carrying out a given task, which has been described as similar to the construct of intrinsic motivation defined by Deci and colleagues (Deci & Ryan, 1985; Deci, Vallerand, Pelletier, & Ryan, 1991) and by Harter (1981), as being concerned with engaging in a task out of interest or enjoyment. Utility value refers to how a task will be useful to an individual in the future, and has some resemblance to extrinsic motivation (Deci & Ryan, 1985; Harter, 1981), in that it taps more instrumental reasons for engaging in a task such as how it fits into a person’s future plans. Attainment value relates to the extent to which performance on a particular task provides opportunities for the individual to fulfill a number of identity-related needs. Cost is the negative values component which refers to what the individual has to sacrifice to carry out the task. Cost could include factors such as anxiety, fear of failure or success, and potential loss of self-worth. Task difficulty beliefs are posited to influence achievement-related outcomes via expectancies and values (Eccles [Parsons] et al., 1983; Wigfield & Eccles, 2000), although there has been little research directly addressing these relationships.

EVT and teachers. Previous research into what motivates teachers to enter the profession has resulted in a steady flow of studies from many countries, of which a significant proportion has been conducted in the United States. A seminar review concluded that "altruistic, service-oriented goals and other intrinsic motivations are the source of the primary reasons entering teacher candidates report for why they chose teaching as a career" (Brookhart & Freeman, 1992, p. 46). Since then, an OECD report (2005) reported the most common motivations for teaching to be the desire to work with youth, potential for intellectual fulfillment, and to make a social contribution, based on studies from France, Australia, Belgium (French Community), Canada (Québec), the Netherlands, the Slovak Republic, and the U.K. The desire to work with children and adolescents has been identified as central in many studies (e.g., Fox, 1961; Joseph & Green, 1986; Kyriacou & Coulthard, 2000; Lortie, 1975; Tudhope, 1944; Valentine, 1934), whereas "extrinsic motives" such as
salary, job security, and career status have been more important in different sociocultural contexts such as Brunei (Yong, 1995), Zimbabwe (Chivore, 1988), Cameroon (Abangma, 1981), the Caribbean (Brown, 1992), Jamaica (Bastick, 1999) and Turkey (Kılıç, Watt, & Richardson, 2012). However, the absence of an agreed theoretical and analytical framework has meant researchers have not always shared understandings of what constitutes intrinsic, altruistic, extrinsic, or other motivations. For example, the desire to work with children has at times been regarded as an intrinsic (e.g., Yong, 1995), and at other times an altruistic motivation (e.g., Yong, 1995). Varying conceptualizations and operationalizations have resulted in a lack of definitional precision and overlapping categorizations.

EVT provided a particularly useful and cohesive framework to organize and guide research concerning the motivation to choose a teaching career. Motivations previously identified as influential in the teacher education literature were mapped to constructs in the expectancy-value framework, allowing us to locate previously identified motivations within an integrative and comprehensive model, which suggested additional important motivations. Our FIT-Choice (Factors Influencing Teaching Choice; www.fitchoice.org) program of research began at its outset with the development of the FIT-Choice scale, designed to allow comparative measurements of teacher motivations locally and elsewhere.

The FIT-Choice model taps the “altruistic”-type motivations emphasized in the teacher education literature (e.g., Book & Freeman, 1986; Brown, 1992; Lortie, 1975; Moran, Kilpatrick, Abbott, Dallatt, & McClune, 2001; Serow & Forrest, 1994) as well as more personally utilitarian motivations and intrinsic motivations, together with ability-related beliefs which are the focus of the broader career choice literature (see Lent, Lopez, & Bieschke, 1993). In addition to self-beliefs and values, the FIT-Choice model includes perceptions about the teaching profession (task-beliefs). These reflect perceived demands (heavy workload, emotional demand, hard work) and rewards (salary and social status), the imbalance between which we conceptualize as a “cost.” We have provided a review elsewhere (Watt & Richardson, 2008b) of how the FIT-Choice factors map to expectancy-value theory, Social Cognitive Career Theory (SCCT; see Lent Lopez, & Bieschke, 1993), and to key findings within the existing teacher education literature. All parts of the model are proposed to work together to predict choice of a teaching career and professional engagement outcomes.

Specific motivations in the FIT-Choice model (see Figure 11.1) are teaching ability beliefs, intrinsic value, personal utility values (job security, time for family, job transferability), social utility values (shape future of children/adolescents, enhance social equity, make social contribution, work with children/adolescents), social influences (of friends, family, or work colleagues thinking one should become a teacher), positive prior teaching and learning experiences, and the negative motivation of having chosen teaching as a “fallback” career in light of claims in the teacher education literature and the public media wherein entrants may have failed to be accepted into their career of choice or otherwise unable to pursue their first-choice career (see Book, Freeman, & Brousseau, 1985; Haubrich, 1969; Robertson, Keith, & Page, 1983).

Social utility value factors resemble altruism as variously described in the teacher education literature (Book & Freeman, 1986; Brown, 1992; Fox, 1961; Joseph & Green, 1986; Serow, Eaker, & Ciechalski, 1992). Personal utility values tap various quality of life issues such as finding time for family and job security (Bastick, 1999; Jantzen, 1981; Richardson & Watt, 2006; Robertson et al., 1983; Tudhope, 1944; Yong, 1995). Such values resonate with beliefs about what constitutes a balance between work and life, how to achieve that balance, and the type of occupation that provides for a secure future. These personal factors have typically been nominated as extrinsic motivations in prior research, although that label obscures the distinction from factors which we distinguish as socialization influences and task perceptions.

The FIT-Choice measurement platform allows for the identification of which motivations and task beliefs are more and less important for choosing teaching as a career. It also permits comparisons across settings including Australia (Richardson & Watt, 2006), the United States (Lin, Shi, Wang, Zhang, & Hui, 2012; Watt, Richardson, et al., 2012), Norway (Watt, Richardson, et al., 2012), Croatia (Jugovic, Marusic, Ivanec, & Vidovic, 2012), Germany (Konig & Rothland, 2012; Watt, Richardson, et al., 2012), China (Lin et al., 2012), and Turkey (Kılıç, Watt, & Richardson, 2012). Fallback career motivations were uniformly low, except in China and Turkey, likely reflecting the availability of work within those job markets. Ability and intrinsic motivations were highly rated among all but the samples from China and Turkey, in which collectivist cultures career choices may be less based on individual interests and abilities; or, more basic needs such as job security may have primacy in a developing nation such as Turkey, on which that sample indeed scored highest. Social utility values were high in general, but notably lowest in the Chinese sample, and in between for the German. Social values may be taken more for granted in collectivist Chinese culture, and the tracked school system in Germany could mean
future teachers perceive lower agency to achieve social equity outcomes and youth opportunities through educational structures. Personal utility values were strikingly similar and rated moderately across samples, presumably reflecting basic needs in contemporary society, although the Turkish sample rated job security somewhat higher as already mentioned.

In general, future teachers believed teaching to be a highly demanding career (including heavy workload, emotional demand, and hard work), with low rewards in terms of salary and social status. The Chinese and especially the Turkish sample rated the demands of teaching substantially lower, possibly due to the collectivist approach to teacher development and group accountability in the Chinese sample, and the relative demandlessness of alternative available work in the developing Turkish context. Perceptions of higher salary in the German setting reflected objective context differences. Values about teaching as a socially responsible and morally worthwhile career starkly contrast with fallback and personally utilitarian values, or beliefs that monetary rewards and status are important career outcomes.

EVT further posits that expectancies and values predict domain-specific achievement behaviors, such as performance, efforts, and persistence. Yet, little is known about the long-term effects of initial teaching motivations. Can they have lasting effects on professional engagement and even on beginning teachers' subsequent teaching styles? Results from our longitudinal study highlight an enduring effect of initial motivations for choosing teaching, which influence professional engagement and teaching styles up to eight years later. We have examined how initial motivations for teaching (incorporating values and beliefs components) influenced professional engagement and career development aspirations (PECD; Watt & Richardson, 2008b), and self-reported teaching style (TSS; Watt & Richardson, 2007), using longitudinal Australian Fit-Choice data spanning entry to (Time 1) and exit from teacher education (Time 2), up until 8 years of teaching experience (Time 3). Intrinsic and ability (self-belief) motivations to teach at Time 1 predicted Time 3 positive teaching behaviors, as did social utility values through their influence on whether participants planned to remain in the profession at Time 2 (Watt, Richardson, & Devos, 2013). Conversely, fallback career motivations subsequently lowered professional engagement and career development aspirations, and reduced positive teaching behaviors during early career. Social influences, such as being persuaded by family, friends, or others to become a teacher, led to negative teaching practices.

The most adaptive motivations for choosing teaching as a career were thus ability self-beliefs, and wanting to work with youth to be instrumental in shaping their futures and make a social contribution by enhancing social equity (social utility values)—which resonate with teachers' adaptive mastery and relational goals orientations identified by Butler (2012; see section following). Problematic motivations were clearly fallback career and, interestingly, social influences, which predicted teaching negativity (including responding negatively or angrily to students' mistakes, use of sarcasm, or deliberate embarrassment; Richardson & Watt, in press).

We interpret the negative consequences from social influence motivations in terms of SDT discussed later in the chapter. Within the SDT perspective, choosing a teaching career based on persuasion from others suggests a "controlled" motivation, rather than a positive "autonomous" motivation. This has implications for teacher recruitment efforts; the negative effect of social influences needs to be carefully considered when persuading individuals to enter into the teaching profession.

Our continuing program of research addresses several core issues: (a) why choose the career of being a teacher?; (b) why do people stay in the job, burnout, or leave?; (c) how do motivations intersect with sociocultural factors to impact teachers' professional development and personal well-being?; and, (d) what types of profiles are evident in teachers' career trajectories? Such questions require following the same individuals over an extended period of time to address critical issues in the current climate of teacher shortages and concerns regarding teacher quality—with implications for policymakers, employers, and teacher educators. Longitudinal data allow the real, and necessary, opportunity to explore and test how processes unfold over time to produce outcomes.

Achievement Goal Theory

Achievement goal theory (AGT) originally distinguished a task (or mastery) goal orientation from an ego (or performance) one (Dweck & Elliot, 1983; Nicholls, 1984). Since then, the trichotomous goal framework was proposed (Elliot & Church, 1997; Elliot & Harackiewicz, 1996; see also Nicholls, 1989), which distinguished performance approach from performance avoidance goals, additional to mastery goals. Individuals who hold a performance approach goal are motivated to demonstrate their abilities relative to others, in contrast to those who hold a performance avoidance goal and are motivated to avoid demonstrating their relative lack of ability. A parallel distinction was subsequently proposed for mastery goals in the 2 x 2 achievement goal framework (Elliot, 1999; Elliot & McGregor, 2001; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Pintrich, 2000a, 2000b) which introduced a mastery avoidance goal, defined as a focus to avoid misunderstanding, not learning, or not mastering a task. Empirical support for the 2 x 2 goal structure has been found (e.g., Elliot & McGregor, 2001; Bong, 2009; Nien & Duda, 2008; Njoukou, 2007; Sideridis, 2008), although "classical" goal theorists have not all embraced the mastery avoidance construct (e.g., see the debate in the Journal of Educational Psychology, 2002). The two approach goal orientations have been found to relate to more positive predictors and outcomes, with mastery approach being the most positive. On the other hand, performance avoidance goals lead to maladaptive outcomes, particularly when self-beliefs of competence are low (Law, Elliot, & Marayama, 2012).

AGT and teachers. In the program of research conducted by Butler and her colleagues, achievement goal theory has been creatively and systematically adapted to the study of teacher motivation, because the school has been found to be an achievement arena not only for students, but also for teachers who strive to feel successful in their work, although teachers differ in their beliefs about what constitutes success, and thus in their goal orientations for teaching. Teachers' goals can similarly be conceptualized in terms of mastery, performance approach, and performance avoidance dimensions. Further, strivings to attain close and caring relationships with students have been identified as a distinct new class of teachers' "relational goals" (Butler, 2012). Within AGT, Butler's work has been significant in tapping previously unidentified teacher motivations, goals, values, and beliefs about the relational work
inherent to being a teacher. This line of research has established important links between teachers’ achievement goals, patterns of communication and behavior in the classroom, and students’ resultant learning and achievement outcomes (Butler, 2007, in press; Butler & Shizah, 2008).

Similar to patterns of findings concerning students’ achievement goals, teachers’ mastery goals were associated with positive outcomes including adaptive coping and engagement, mastery-oriented instruction, and their students’ engagement (see Butler, in press). Performance avoidance goals (to avoid the demonstration of poor teaching ability) showed clear negative outcomes including defensive avoidance of help, self-handicapping, burnout, career dissatisfaction, and surface approaches to instruction involving more competitive classroom climates. Patterns for performance approach goals (to prove ability) were less clear-cut. Findings concerning the newly identified class of relational goals showed these teachers provided greater socioemotional support to students (see Butler, 2012; Butler, in press).

Self-Determination Theory

Self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) focuses on the social-contextual conditions which facilitate processes of self-motivation and healthy psychological functioning. SDT is founded on the assumption of three basic human psychological needs—for competence, autonomy, and relatedness (Ryan & Deci, 2000). When these three needs are met people experience autonomous motivation and perceive themselves as “origins” of their own behavior, rather than externally controlled “pawns.” Within this perspective, extrinsic motivations can become internalized through a process of progressive integration with a person’s sense of self.

There are five self-regulatory styles: (a) external regulation means no internalization has occurred and motivators are external; (b) introjection is a partial internalization whereby the goal has been taken in but not really accepted as the individual’s own; (c) in identified regulation, the person has understood the activity as something important for her or his own long-term goals; (d) the last type of extrinsic motivation is integration, where an identified motivation becomes assimilated with other well-assimilated aspects of the self; (e) finally, intrinsic motivation is also an autonomous motivation. The important differentiation drawn by these theorists is between autonomous (or self-determined) and controlled motivations. Autonomous motivation involves volition and choice, controlled motivation involves an external or internal sense of compulsion (Assor, Roth, & Deci, 2004; Grolnick et al., 1997). It is possible that initially autonomous motivations could turn to controlled motivations; for example, when an initial decision (such as to become a teacher) is autonomous, but then actually doing the work entails a sense of compulsion or external responsibility. A large literature has examined predictors of students’ autonomous motivation, and benefits for their engagement and well-being (see Ryan & Deci, 2009).

SDT and teachers. Unlike the extensive research that has focused on predictors of students’ autonomous motivation (e.g., Reeve, 2002), the research on teachers is quite scarce (see Roth, in press). In studies of teachers, autonomous motivations have been associated with perceived accomplishment, teaching self-efficacy, autonomy supportive teaching practices, and reduced burnout. Based on measures with

students, Roth, Assor, Kanat-Maymon, and Kaplan (2007) in Israel adapted and developed measures of teacher motivations from more controlled to more autonomous, in relation to why teachers carry out specific, common teaching tasks. Examples of controlled teacher motivations include to avoid parent complaints or feelings of guilt; autonomous motivations include to let children feel teachers care about them, or to be in touch with children and adolescents (Roth et al., 2007).

Consistent with theoretical predictions, teachers’ feelings of accomplishment increased as teachers moved along the continuum from external to intrinsic motivations; the reverse was true for negatively increasing correlations with burnout (Roth et al., 2007). Findings for burnout were replicated by Perret-Clermont, Senécal, Guay, Marsh, and Dowson (2008) in Francophone Canada, who also examined relationships of teacher motivations with self-efficacy. Intrinsic and identified motivations were positively, and introjected and external motivations negatively, associated with teaching self-efficacy measured by the French-Canadian version (Perret-Clermont, Senécal, & Guay, 2005) of the Classroom and School Context Teacher Self-Efficacy Scale (Friedman, 2003). The scale encompassed items related to instruction, discipline, and consideration of students, which were analyzed as one composite factor. Autonomous teacher motivation has additionally been found to associate with autonomy supportive teaching practices that nurture choice and relevance to students (Perret-Clermont, Guay, Senécal, & Austin, 2012; Pelletier, Seguin-Levesque, & Legault, 2002; Roth et al., 2007; Taylor & Noudamis, 2007; Taylor, Noudamis, & Stamp, 2008).

APPROACHES TO THE STUDY OF TEACHER MOTIVATIONS AND BELIEFS

Our review of teacher motivation research from the theoretical perspectives of EBT, AGT, and SDT has highlighted the theoretical adaptations involved in the study of teachers, the role of self- (and task-) beliefs within each, and empirical findings so far. In this section, we discuss etic and emic approaches to the study of teacher motivations and beliefs, with particular reference to extensive cross-cultural, and intensive situated studies. Human beings develop throughout their life-span and are engaged in specific cultural contexts where they have shared assumptions about how the world is, and how all aspects of daily life are conducted. In the formation of motivations, beliefs, and values, we might expect that different macro- and micro-level cultural factors, enmeshed in social and cultural practices, behaviors, and events, together with the micro-level interactions between individuals and groups, dynamically interact. Thus, motivations, beliefs, and values do not exist independently of the individuals who hold them in specific social and cultural contexts.

Etic Approaches

Ethic approaches describe phenomena in terms that can be applied across cultures. Teacher motivation, beliefs, and values are located within macro- and micro-level social and cultural systems constituted by political policies, organizational systems, policies, and practices at the level of the district and school. Since teachers operate within these environments located in particular sociocultural settings, it is likely that these settings will form and fashion teachers’ motivations, beliefs, and values.
With the development of common measurement platforms from which to approach the study of teacher motivations across studies and settings, it becomes possible to directly compare and contrast how motivations differ across samples and contexts. As discussed earlier in this chapter, we already know that the relative importance of individuals’ various motivations for choosing teaching as a career differs according to broad socio-cultural factors.

Disturbingly, evidence is accumulating to demonstrate that present school accountability reforms in the West serve to undermine teachers’ adaptive mastery and relational goals and promote maladaptive ability and work avoidance goals (Butler, in press), also, to reduce teachers’ autonomous motivations and promote controlled motivations (Roth, in press). Kieschke and Scharaschmidt (2008) conducted an extensive study on teachers’ professional commitment and health in Germany and expressed concern about the consequences of regimentation and external interference in teaching; they recommended that: (a) teachers need to be given more autonomy in their work to allow for self-determined professional goals; (b) excessive demands from overwhelming educational tasks that are completed alone need to be minimized; and (c) teachers need clearer separation of life at school and leisure time; school tasks often undertaken in the evening and on weekends allow little opportunity for emotional distancing, recovery, and regeneration. In a teaching-for-testing culture such as China (see Ho & Hau, in press for a review), it is possible that findings would differ if there is a match between individuals’ and cultural beliefs and values concerning the nature of the teachers’ role and student learning.

Theories for understanding achievement behavior in the West have focused on the individual as the unit of analysis, based on the concept of the independent and autonomous self. In contrast, the interdependent self (Markus & Kitayama, 1991) is more prominent in the East. Consequently, teacher motivation involves seeking consensus about what works for the common goal, or so-called “middle way” (Gao, 2010; Tsui & Wong, 2009), and a reflection of the yin-yang philosophy in which opponents are considered interdependent and mutually supportive (Hue, 2008). In their review, Ho and Hau (in press) wonder what role individual differences in teachers’ expectancies, values, goals, and control beliefs play in the more collectivist-oriented cultural context. For example, Klassen et al. (2008) found that Singaporean teachers’ collective self-efficacy beliefs strongly mediated the effects of student socioeconomic status on perceived school climate, likely due to teachers’ belief in the interactive and collective influence of the staff as a whole. In contrast, Canadian teachers in an individualistic culture may maintain a focus on individual professional development rather than the agency of the group.

Ho and Hau (in press) explained that the existence of cultural factors should not lead us to conclude that theorization and research can only be carried out within its culture-specific meaning (an ethic perspective), and that comparisons which involve same constructs and measures across settings are also important to identify where differences may occur (an ethic perspective). However, at the same time, they caution against transporting Western constructs directly into other contexts without first examining the meaning and underlying assumptions of the constructs (see Karabenick, et al., 2007). Although a substantial literature has accumulated concerning Chinese students’ learning motivations (see Hau & Ho, 2010, for a review), similar systematic investigation of teacher motivation is in its infancy.

Motivational Analysis

April 2020

Emic Approaches

Situated approaches (e.g., Nolen, Ward, & Horn, 2011; Turner & Patrick, 2008) involve interpretative analyses of interview and observation data. Such studies do not seek generalization as their goal, but undertake more nuanced examination of a phenomenon or setting. Situated studies offer the possibility to understand how teacher motivations develop, become salient, change, and are expressed in dynamic interaction with particular student, classroom, and school factors. The conduct of both nuanced situated studies alongside large-scale longitudinal studies seems to us to be critical to understand the what and why of teacher motivations, how they develop and are expressed, and why they matter.

In the research concerning teacher motivation there has been a greater concentration thus far on psychological variables, and less attention to contextual or situated aspects (with the exception of the situated approaches). Sensitive, sound, robust theories and measurements are additionally needed at the level of contextual effects, to determine in comparative studies how different workplace environments nurture or constrain teachers’ motivations. Developments in multilevel modeling allow us to examine individuals within settings, to begin to parse the impacts of person and school characteristics on teacher motivations, engagement, and emotions (e.g., Kliasmaa, Kanter, Trustwein, Lüdtke, & Baumert, 2008). In this endeavor, methods beyond self-report surveys are required. Experience sampling is one method that can provide insights into teachers’ beliefs, motivations, and experiences during the act of teaching, enabling moment-to-moment information that may not be accessible if sought after the event. Such a method allows us to examine the exercise in situ of teachers’ beliefs, values, and motivations in classrooms (e.g., Carson, Weiss, & Templin, 2010; Keller, Frenzel, Goetz, Pekrun, & Hensley, 2013; Malmberg, 2010).

Both ethic and emic approaches will be important to progress the burgeoning body of work concerning teachers’ beliefs and motivations, incorporating methodologies additional to self-report, such as observations and experience sampling. Motivational lenses offer the opportunity to examine relationships within and consequences upon the broader systems within which teacher self-beliefs reside. It is now only that we are beginning to understand some of the core values, beliefs, and expectancies that attract people into teacher education, as well as those that influence their daily practice and students’ outcomes, and sustain teachers as healthy and effective professionals, within particular sociocultural and contextual settings. Researchers need to continue to address the motivations and psychological supports that beginning teachers require to sustain their “fitness to practice.” It is intriguing that only recently have teachers’ own outcomes been considered important in their own right, and not only as they impact students.

On the other hand, what can the burgeoning literature on teachers’ beliefs offer the developing field of teacher motivation? The teachers’ beliefs literature has encompassed a diversity of beliefs including, but not limited to, self-beliefs. Other beliefs, particularly task-related and sociocultural beliefs, hold promise to enrich the study of teacher motivation. Indeed, these other kinds of beliefs are important yet under-studied factors in ETV; task beliefs are also directly implicated in mastery goals within AGT. The two bodies of literature—teacher motivation and teachers’ beliefs—have developed rather independently and yet, each has much to offer the...
other. It is timely to marry them in a way that goes beyond simple addition or a pastiche, and systematically fosters theoretical cross-fertilization and hybridization.

OUTLOOK AND FUTURE DIRECTIONS

There is an urgent need for reliable, large-scale, long-term, cross-cultural data, incorporating extensive quantitative measures alongside targeted rich qualitative components, to examine the what and the why of teacher motivations and development. In this pursuit, we may not necessarily wish to keep measuring the same motivational factors over time. We are presently lacking a coherent developmental theoretical approach to the study of teachers' motivations throughout their career. It may be that different theories will be important to understand different developmental stages. For example, EVT may be most relevant to the choice of teaching as a career, AGT for teachers' daily practices, and SDT to the promotion of generally autonomous motivated behavior.

There will very likely not be a single stage model we can come up with to describe the development of teachers' motivations and beliefs. We already know that, in many Western and European countries, up to 50% of teachers leave within their first five years (Chang, 2009; Henke, Chen, & Geis, 2000; Ingersoll, 2003; Johnson & Birkenhead, 2003; MCEETYA, 2003; OECD, 2005; Preston, 2000), established in the United States to be due to a “revolving door” through which large numbers of teachers depart teaching long before retirement (e.g., Ingersoll, 2001, 2012; Ingersoll & Strong, 2011). By contrast, where teachers are accorded better pay and conditions such as in Scotland, Ireland, Sweden, Finland, and Iceland, there are fewer recruitment and retention problems than in countries where the pay and conditions of the profession are lower. It is important to examine the motivations that sustain people in the profession versus those that deter or push people away, which may not simply be opposite sides of the same coin.

We expect that different kinds of school contexts will affect the realization of or not of teachers' motivations, which, if left unfilled, are likely to create a double-edged sword that could lead to burnout and disappointment. For example, teachers who are motivated to work with youth and enhance social equity, may (and do) find themselves frustrated and dispirited when their time is taken up by administrative and accountability work which takes them away from what they regard as their core responsibilities. This has begun to create a disjunction between why teachers want to teach, and the work they are required to spend their time doing. People who became teachers because they want to work with children and adolescents become less satisfied with their work, if it means they have little time to engage in relational work on a daily basis. In this way, the same motivations can be a driving force for good or ill, dependent on the degree of match between a teacher and her or his teaching environment.

In determining which beliefs and motivations are adaptive versus maladaptive, it is essential to understand what outcomes are predicted by different beliefs and motivations, within what contexts. Deciding which outcomes ought to serve as outcome criteria in this endeavor will be a non-trivial matter. It is also necessary to determine antecedents to, and stability versus malleability of, beliefs and motivations that are identified as positive or negative, before implications for policy and practice can be clarified. For instance, stable and non-malleable factors may be best considered as selection into teacher education, whereas changeable or malleable factors ought to be addressed during teacher education and early career induction. To adopt identified positive beliefs or motivations as selection criteria into teacher education at this point, in our view, would be premature and insufficiently informed.

It is further necessary for teacher education to equip beginning teachers with coping strategies to effectively deal with everyday problems and the capability to self-manage stressful events to support and protect themselves psychologically and emotionally (Kieschke & Schaarhuch, 2008). Such goals are given considerable attention in the preparation of clinical and school psychologists, and ought to be incorporated as a specific course within initial teacher education programs and early career professional development. Although mentoring programs for beginning teachers have been introduced in many countries, the success of the programs has been negatively impacted by inappropriate mentor matches, and low levels of appropriate mentor and mentee interaction and support (see Kardos & Johnson, 2010; Wang & Odel, 2002). There have also not been designed to specifically address the psychological and emotional dimensions of teachers’ work.

REFERENCES


Bastick, T. (1995). A three factor model to resolve the controversies of why teachers are motivated to choose the teaching profession. Bulletin Cross Campus Conference in Education, St Augustine, Trinidad.


Motivational Analysis • 211