

# Preface

## Toward a New Science of Interest

Since the seminal volume, *The Role of Interest in Learning and Development* (Renninger, Hidi, & Krapp, 1992), there has been renewed attention to the construct of interest in psychology. One of the major contributions of this work was the simple, yet important, distinction between *situational interest* and *individual interest*. By making this distinction, the authors clarified that interest has different forms and developmental stages. Situational interest, they argued, involves a state of heightened attention plus positive affect sparked by something external to the individual, such as an exciting physics lecture or a challenging puzzle. By contrast, they argued that individual interest is a more internal process. It reflects an idiosyncratic and enduring relationship between an individual and particular content that is associated with increased attention, positive affect, accrued relevant knowledge, and personal value. This distinction has since inspired research to further understand the construct of interest.

In the 25 years following the publication of the seminal volume of Renninger et al. (1992), 10,544 academic papers have been published on the topic as it relates to motivation, whereas only 2,279 had been published between 1900 and 1991. The enthusiasm for this line of research is palpable. Perhaps more than anyone, social and educational psychologists have pioneered the recent academic work on interest. Researchers in those fields who study motivational processes—particularly achievement motivation—recognized a critical link between interest and intrinsic motivation; that people’s desire to understand something new or to acquire interest-relevant knowledge motivates them to act and think for reasons of their own choosing. For social psychologists, interest is a variable that contributes to their understanding of self-regulation and why (at times) people do what they do (Sansone & Smith, 2000; Chap. 2). For educational psychologists, research on interest helps explain the motivation to learn, and how to best promote interest in educational contexts (Harackiewicz, Smith, & Priniski, 2016).

In years past, however, many researchers used the term “interest” and “intrinsic motivation” interchangeably (e.g., see Sansone & Harackiewicz, 2000). In other words, intrinsic motivation and interest both referred to doing something for the pure enjoyment of the activity itself. Contemporary researchers, however, stress the independence and interrelation of these separate constructs. Interest can initiate the motivation to understand particular content or engage in particular activities, as well as to maintain that motivation over time. Interest can also result from engagement in particular content and activities. Therefore, interest is not simply the same as enjoyment or intrinsic motivation, but instead reflects a relationship a person has with particular content or activities. At the level of situational interest, this relationship may be triggered and supported by environmental factors. With regard to individual interest, the relationship is more idiosyncratic and self-perpetuating. Both situational and individual interest can spark and sustain intrinsic motivation.

The recent uptick in research on interest by psychologists has also brought another change: a more scientific approach. Up until about 20 years ago, much of the published work on interest relied on a scant literature, conjecture, case studies, and the like, to inform theory. Recent psychological research, however, has applied rigorous scientific methods, enabling researchers to make more definitive, empirical, and often causal, conclusions. Furthermore, previous research and theory, largely conceived of by educational researchers, has been *applied research*. That is, it has primarily focused on understanding and promoting interests for particular topics in educational contexts. Psychological researchers have since taken a more *basic research* approach, conducting studies and developing theory to more broadly understand the role of interest in human functioning. In turn, this basic research has informed a new wave of intervention research (Harackiewicz & Knogler, 2017; Lazowski & Hulleman, 2016).

## ***Purposes of This Volume***

One purpose of this volume is to document the current state of research and theory on interest as it relates to motivational processes. In doing so, we highlight research, largely conducted by social psychologists, that implements rigorous scientific methods. This theoretically based experimental research is also intended as a reference to inspire and inform psychological interventions that increase interest, motivation, and achievement among multiple populations.

Another purpose of this volume is to help bring various traditions of relevant research and theorizing together under the umbrella of “interest.” Interest scholars come from a diverse array of fields, such as psychology, education, and neuroscience. Meanwhile, there is little agreement on how different interest-related constructs are defined, how terms are used, or their taxonomy. For example, some scholars use the term “situational interest” to mean the same thing as “curiosity” (e.g., Chap. 4), whereas others draw a sharp distinction between the two constructs (e.g., Renninger & Hidi, 2016). As you read through this volume, you will see some

disagreement with regard to conceptualizations of constructs among researchers, and this is to be expected in an active research community.

To this end, yet another purpose of this volume is to provide a more inclusive understanding of what we call the *interest spectrum*, acknowledging the various forms and developmental stages it comprises. The predominant model of interest development is the four-phase model (Hidi & Renninger, 2006). The model has been critical to understanding how interest can begin as an externally elicited situational response to an internalized interest, which is then integrated into the self-concept and can be pursued without external supports. That said, it is our goal to explicitly acknowledge other constructs that fall under the umbrella of “interest” as well as to extend the spectrum beyond four phases.

### ***Organization and Content of This Volume***

This volume is organized into four parts, covering the different theoretical perspectives of interest, its functions, spectrum, as well as its promotion and development.

Part I covers leading contemporary theoretical perspectives and conceptualizations of interest. In Chap. 1, Mary Ainley contributes an overview of these issues in which she describes how interest can be triggered by external events (situational interest), while other times remains largely internally supported (individual interest). Ainley then discusses two dominant theories explaining how interests arise and develop, in an attempt to better understand how a triggered situational interest can transform into a well-developed individual interest. She also highlights the lacuna in our understanding of this developmental process and its complex dynamics.

Part II focuses on several central functions of interest: its role in self-regulation, motivation, and learning. First, Dustin B. Thoman, Carol Sansone, and Danielle Geerling discuss the role of interest in self-regulation (Chap. 2). In attempting to understand why people maintain motivation over time, the authors argue that it is important to understand interest as an experiential aspect of their engagement in a task or activity. To this end, the authors argue that interest, whether anticipated or experienced, can influence the decision to engage in an activity, how engagement is experienced, and whether one chooses to reengage in the activity. Furthermore, the anticipation or experience of interest is affected by the degree of congruence between the purpose of the activity and the individual’s goal.

In Chap. 3, Paul A. O’Keefe, E. J. Horberg, and Isabelle Plante discuss interest as a motivational variable and the qualities of engagement it manifests. Specifically, they discuss research on the psychological experience of interest, as well as how and when interest can increase performance and persistence. They further discuss research suggesting that implicit theories of interest can influence whether someone might acquire new interests and ultimately engage in related content or activities. Finally, the authors discuss research demonstrating how and when interest can result from engagement.

Finally, Jerome I. Rotgans and Henk G. Schmidt discuss the role of interest in knowledge acquisition (Chap. 4). They review research suggesting that situational interest—sparked by a gap in knowledge—leads to the acquisition of knowledge in order to increase understanding. They further argue that individual interest is a by-product of knowledge acquisition, which, in turn, causes situational interest.

Part III of the volume presents the spectrum of interest. Traditionally, interest has either been dichotomized into two categories (i.e., situational and individual interest), or thought of as a developmental continuum starting from triggered situational interest and ending with well-developed interest (Hidi & Renninger, 2006). Contemporary theory and research, however, suggests that interest may comprise a larger, more nuanced spectrum. In this volume, we present chapters from researchers who focus on different forms of interest that follow and expand upon the four-phase model (Hidi & Renninger, 2006). To this end, these chapters generally reflect interest as an externally supported construct to a mostly internally supported one, which, respectively, includes curiosity, situational interest, individual interest, passion, and obsession. Most notably, although curiosity, passion, and obsession share many central features of what most researchers refer to as “interest,” they are seldom discussed as different instantiations of interest. Our motivation for including these constructs in the “interest spectrum” is to offer a more complete picture of interest and its various forms, which vary in internality and intensity. By doing so, we hope to contribute a more unified framework for studying interest and its different forms.

The first chapter of this section (Chap. 5) covers curiosity. Paul Silvia takes a functional approach to understanding curiosity and describes it as an emotion. As such, he makes an evolutionary argument that it serves three important functions. The first is that curiosity motivates people to learn for the sake of learning. Next, he argues that, although novelty can sometimes cause anxiety, curiosity counteracts our tendency to avoid the unknown. Finally, he argues that curiosity also counteracts our tendency to only seek enjoyment, causing us to approach stimuli that are not necessarily reliable sources of reward.

In Chap. 6, Maximilian Knogler discusses situational interest. He argues that researchers commonly and implicitly use the term “situational interest” to describe it as both a psychological state and as being a less developed, largely externally supported form of interest. This lack of definitional precision has caused some confusion in the field and Knogler argues for the need to clarify these distinctions.

Moving along the spectrum to more internalized and enduring forms of interest, Amanda M. Durik, Meghan Huntoon Lindeman, and Sarah L. Coley discuss individual interest (Chap. 7). They present a theoretical model to explain why people choose to engage in particular activities or content. Furthermore, they draw from research on various motivation constructs—for example, desired possible selves, mastery goals, goal schemas, and construal level—to explain what supports engagement, its experience, and competence valuation.

In the next chapter (Chap. 8), Robert J. Vallerand discusses passion, which can be considered a more internalized and self-defining form of well-developed interest. He outlines a program of research on the Dualistic Model of Passion that

distinguishes two types of passion: harmonious and obsessive. *Harmonious passion* for an activity, he argues, is autonomously internalized. It exists in harmony with other aspects of one's life. By contrast, *obsessive passion* is experienced as more externally controlled, such that one feels they must engage in the activity, which can cause conflicts with other aspects of life, such as with one's obligations.

The last chapter in this section (Chap. 9) focuses exclusively on obsession and approaches it as an extreme form of well-developed interest. Here, Dean Keith Simonton discusses the role of interest and obsession in exceptional performance, and, to this end, highlights research on four types of people: creative geniuses, polymaths, child prodigies, and autistic savants. In doing so, he demonstrates that obsession plays different roles in exceptional performance among these populations.

It should be noted that, although we present various forms of interest along a continuum in Part III, there is some overlap among some of the constructs. For example, some researchers distinguish curiosity from triggered situational interest (e.g., Renninger & Hidi, 2016), whereas others do not make such a strong distinction (e.g., Chap. 4). Well-developed interest and passion also share many qualities, such as being largely internally supported. It is our hope that this volume motivates researchers to develop clearer distinctions among these constructs with the goal of better understanding the spectrum of interest.

Part IV addresses the development and promotion of interest. In Chap. 10, Chris S. Hulleman, Dustin B. Thoman, Anna-Lena Dicke, and Judith M. Harackiewicz discuss the role of values in the development of individual interest. Furthermore, they review intervention research demonstrating how interest can be promoted.

Finally, in Chap. 11, Allison Master, Lucas P. Butler, and Gregory M. Walton discuss the role of social processes in the promotion of interest. In particular, they argue that engagement in an activity with others, whether real or imagined, promotes interest in the task.

Considered together, these chapters provide a broad overview of the new science of interest. Together, we hope to have successfully (a) highlighted the contemporary scientific research on interest, (b) extend the four-phase model (Hidi & Renninger, 2006) by illuminating additional forms that interest can take, (c) present interest as a spectrum that varies in its degree of internality and intensity, and (d) enabled interest researchers to share a common vocabulary, as well as conceptualizations of the various forms of interest.

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