Temporal Identity Integration as a Core Developmental Process

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Abstract

The construct of identity has captivated scholars across the social sciences, humanities, and the arts. For good reason, too, as the question *who am I?* cuts to the core of human experience. Following Erikson's theorizing, developmental psychologists have stressed the importance of an identity that is extended through time. A healthy identity is defined, in part, by individuals' ability to reconcile and integrate their past experiences, current concerns, and future prospects, a phenomenon we label *temporal identity integration*. In this chapter, we review the foundational theoretical and empirical work pertaining to temporal identity integration, drawing on developmental, social, and personality psychology perspectives. We then review some of the most exciting empirical findings across these areas, and provide suggestions for future directions on the topic.

When I (M. Syed) was in an elevator while attending the meetings of the Society for Research on Identity Formation, an older gentleman riding along looked closely at my badge and asked, "Identity? What's that about?" After a few seconds I replied, "It is about who people are and what they want to do with their lives." His reply: "Well, what's more important than that?!"

The question *who am I?* is simple, and yet it cuts to the core of human experience. The question has been asked by psychologists for nearly as long as psychologists have been asking questions. Indeed, the question of *who am I?* was a major focus of William James' (1890) groundbreaking text, *Principles of Psychology*. Pursuant to these historical roots, the question of *who am I?* has been pondered by scholars from across the social sciences, humanities, and the arts, each with different foci. Even within the social sciences (or psychology alone) different schools of thought on the *problem of identity* have relied on quite different conceptualizations, theories, and methods (Syed, Azmitia, & Cooper, 2011; Vignoles, Schwartz, & Luyckx, 2011).

To our reading, the fact that multiple disciplines and subdisciplines have devoted substantial time and resources to understanding identity suggests that the construct truly is core to the nature of being, and has developmental significance. In this chapter, we extend this notion to individuals' understanding of the relation between identity and time, or *temporal identity*. As in the case of identity, the study of time has figured prominently throughout the social sciences, suggesting that it is also a core element of being. Accordingly, we highlight the foundational research, cutting-edge work, and future directions as related to temporal identity integration as a core developmental process.

FOUNDATIONAL RESEARCH

Consistent with the notion of a core developmental process, the theoretical roots for temporal identity integration run deep and wide. Despite James' early work on this topic, Erik Erikson is the theorist most readily identified with the term "identity." Indeed, Erikson's biographer, Lawrence Friedman (2000), called him "identity's architect" because of his voluminous writings on not only *what identity is*, but more specifically *how identity develops*. Erikson's focus on development set him apart from James, who was more concerned with the "here and now" as opposed to the "how and when." Although Erikson offered many (sometimes contradictory) definitions of identity (Waterman, 2014), he broadly considered identity to be a personal sense of coherence and continuity, established through integrating the self both contextually and temporally. Contextual identity integration refers to the coordination of multiple identity domains that are relevant for one's life (e.g., work and relationships). In contrast, temporal identity integration refers to a sense of personal continuity through time. In other words, are individuals' views of who they were in the past reasonably consistent with who they are now and who they envision themselves to be in the future? Thus, identity integration involves the coordination and synthesis of the self across space and time.

Erikson's emphasis on integration, continuity, and coherence oftentimes leads researchers to believe that he advocated for a static, unchanging view of the self—that temporal integration is only achieved by being the same through time or that contextual integration is achieved by acting the same across different life spaces (Sampson, 1989). Such beliefs represent a misread of Erikson's theory. Rather than advocating for literal sameness, Erikson discussed the importance of fidelity, which refers to being/acting in accordance with who individuals believe themselves to be. Thus, rather than static sameness, what is particularly important is the absence of contradiction.

Erikson's writings were largely theoretical, rather than based on empirical evidence. Within developmental psychology, the empirical field most closely associated with Erikson, the study of identity development has been dominated by the identity status model (Marcia, 1966; see McLean & Syed, 2014), which, interestingly, does not incorporate temporal identity integration. Rather, the focus is on determining individuals' current identity structure by investigating their process of developing an identity (specifically, exploration and commitment). As a result, developmental psychology has an ironic dearth of empirical data that speak to temporal identity integration.

Fortunately, developmental psychology is not the only game in town. Merging the "study of lives" tradition in personology (Murray, 1938) with Erikson's developmental perspective, McAdams (2013) developed the autobiographical life story model, in which he argued that identity can be conceptualized as an integrated and evolving life story. In contrast to Marcia's (1966) operationalization of Erikson, McAdams relied heavily on the notion of temporal identity integration. It is through telling stories and constructing a personal narrative that individuals integrate their past, present, and future. Identity is not only revealed through telling stories, but identity itself is a story, an extended narrative through time that the narrator works to keep going.

Returning to the idea of a core developmental process, there are other subdisciplines of psychology that conduct research relevant to temporal identity integration. This work, however, is not explicitly situated within an Eriksonian framework, or in some cases, any identity framework at all. Rather, the focus is on different conceptualizations of time and its relevance for psychological functioning.

In social psychology, for example, the starting point is not the "problem of identity" but rather the concept of time itself. Befitting the field of social psychology, conceptualizations of time have emphasized the interactions between situational forces and individual differences. Zimbardo has been an influential researcher within this realm, contributing much empirical data in support of his model of *time perspective* (Zimbardo & Boyd, 1999). Because time perspective is conceptualized as a stable individual difference, the focus has been on measuring individuals' time perspective structure and the implications thereof. For example, one study demonstrated a reliable, yet modest, positive association between present time orientation and engaging in risky driving practices (Zimbardo, Keough, & Boyd, 1997). Future time orientation, however, demonstrated a small negative correlation with risky driving.

The emphasis within this line of research is on the downstream consequences of different time orientations. This emphasis, along with the conceptualization of time as a stable individual difference, has precluded

investigations of how individuals adopt particular time orientations in the first place. Thus, the social psychological approach to time stands in contrast to the developmental approach to time, in which individual perceptions are believed to change through experience and maturation, with the ultimate goal of temporal integration. Nevertheless, a similarity between the social and developmental approaches lies in the centrality of time in the life space. Indeed, Zimbardo and Boyd (1999) argue that time perspective "provides a foundation on which many more visible constructs are erected or embedded, such as achievement, goal setting, risk taking, sensation seeking, addiction, rumination, guilt, and more." (p. 1272).

Finally, although the focus of this article is on developmental, personality, and social approaches to time and identity, it is important to note that time has also figured prominently in the broad areas of cognitive psychology and brain science. For example, Boroditsky (e.g., Boroditsky, Fuhrman, & McCormick, 2011) has conducted extensive work on understanding the connections between language and thought through an analysis of mental representations of time and temporal metaphors. Examining speakers of English, Mandarin, Hebrew, and others has highlighted the linguistically based cultural variations in how time is represented in language, thought, and action. More broadly, studies of adolescent brain development have indicated the importance of the prefrontal cortex for executing cognitive operations pertaining to the future. In particular, the capacity for long-term planning and the effective weighing of risk versus reward in decision making appear to be linked with prefrontal maturation (see Steinberg, 2005, for a review).

Taken together, it is clear that the foundational research on temporal identity integration is deep and wide. It is limited, however, in two interrelated respects. First, the existing work is more theoretical than empirical, especially within Eriksonian notions of integration. Second, much of the available empirical research is only indirectly related to temporal identity integration. The implications, however, are readily apparent, and one of our goals for this chapter is to argue for the broad framework of identity to better understand and integrate the disparate literatures. In the next section, we highlight some intriguing emerging trends across various topic areas of psychology that have relevance to temporal identity integration.

AREAS OF CUTTING-EDGE WORK

We identified three broad areas in which there is cutting-edge work on temporal identity integration. The first section includes research that is primarily oriented toward the future. In the second section, we discuss research that examined the future in relation to the past and present, and thus is more in line with integration. Finally, in the third section we discuss some of the

most innovative work on temporal identity integration, which is focused on interventions to address health and educational disparities.

FUTURE

Future orientation refers to the degree to which individuals think and plan about the future, including expectations, plans, and feelings of optimism and pessimism (Nurmi, 1991; for a review, see Seginer, 2009). Future orientation affects the decisions that individuals make in the present, and thus influences their future trajectories. Those who are future-oriented tend to consider future consequences of their present actions, and behave accordingly. For example, adolescents who are not highly future-oriented are at higher risk for problem behaviors such as school misconduct (Skorikov & Vondracek, 2007). In contrast, individuals who expect to do well avoid behaving in ways that would threaten their bright future (Routledge & Arndt, 2005).

Much of the research in this area has centered around adolescents, especially focusing on their expectations for future career and family life. Recent work has followed suit, with several studies beginning to investigate future orientation in non-American adolescents (e.g., Iovu, 2013). As a great deal of work has demonstrated the outcomes of future orientation, current studies focus on predictors that influence future orientation, such as family and school connectedness, and explore ways of inducing greater future orientation in adolescents in hopes of reaping the associated positive outcomes (e.g., Crespo, Jose, Kielpikowski, & Pryor, 2013).

Social psychologists have investigated thoughts about the future in terms of *affective forecasting,* or the ability to predict the emotions that will be triggered by future events. Generally, individuals are better at determining whether events will make them happy or unhappy than at predicting how intense those emotions will be (Wilson & Gilbert, 2005). A manifestation of affective forecasting is *impact bias*, or the tendency to overestimate the emotional effects of future events. For example, individuals tend to overestimate the intensity and duration of their resulting negative emotions following a hypothetical breakup with a romantic partner (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998).

Debate about whether people can accurately predict their emotions has recently emerged (Levine, Lench, Kaplan, & Safer, 2013; Wilson & Gilbert, 2013), with critics suggesting that typical procedures for investigating impact bias lead to worse predictions than individuals are really capable of making. As such, the effects of impact bias may not be as strong in real life as they seem in studies. Nonetheless, the concept of affective forecasting is increasingly being applied to a variety of research topics, including hedonic consumption (Alba & Williams, 2013), medical interventions

(Angott, Comerford, & Ubel, 2013), and unethical behavior (Ruedy, Moore, Gino, & Schweitzer, 2013). Recent work has also suggested that inaccurate affective forecasting may serve an adaptive function, by creating positive illusions that allow us to persevere through difficult situations (Marroquín, Nolen-Hoeksema, & Miranda, 2013).

Taking together the literatures on future orientation and affective forecasting presents a puzzle. On one hand, having reasonable conceptualizations about the future is beneficial in a number of ways. On the other hand, those conceptualizations about the future may have little bearing on what actually happens, especially in terms of emotional experiences. Bringing these two literatures into alignment would likely lead to a more robust understanding of the role of future thoughts for psychological functioning.

INTEGRATING PAST, PRESENT, AND FUTURE

While early research on conceptions of time focused heavily on perceptions of the future, more recent work has sought to incorporate past, present, and future. *Time perspective* is conceptualized as an individual difference, which captures individuals' tendency to orient their thoughts and attitudes toward the past, present, or future (Mello, Finan, & Worrell, 2013; Zimbardo & Boyd, 1999). These ideas have been explored extensively within the field of psychology, and are beginning to be applied to other disciplines. For example, studies indicate that individuals' tendency to orient toward the present or future is related to their willingness to engage in environmentally sustainable behavior (e.g., Arnocky, Milfont, & Nicol, 2013) and to engage in preventive health practices (e.g., Roncancio, Ward, & Fernandez, 2013).

Mello *et al*. (2013) have recently extended the study of time and behavior by developing a scale that measures both *time orientation*, as it has traditionally done, and *time relation*, or the degree to which individuals view the different elements of time as connected. Their findings regarding time relation indicated that adolescents who had an integrated sense of the past, present, and future had higher GPAs than those who saw the three as unrelated. Although the findings support the importance of temporal integration, the results should be interpreted cautiously, as the sample sizes were small, and there were few who viewed elements of time as unrelated.

An alternative approach to exploring conceptions of past, present, and future is to investigate the ways in which individuals' self-concepts change over time. This *narrative approach* emphasizes the importance of integrating past, present, and future identities through a narrative life story (McAdams, 2013). Work by Chandler, Lalonde, Sokol, Hallett, and Marcia (2003) suggests that a sense of personal continuity through time is important for mental health, as they found that adolescents who lacked a strong sense of

self-continuity were at higher risk of suicide. As highlighted by research on future orientation, individuals who only weakly connect their present and future selves are more likely to behave in ways that may threaten their future.

Considering the important mental health implications of Chandler and colleagues' (2003) work, it has spawned surprisingly little research on temporal continuity in narrative identity (but see Habermas & Köber, 2014; Pasupathi, Mansour, & Brubaker, 2007). Indeed, the majority of research on narrative identity has focused on connections between the past and the present, with little attention paid to the future (see McLean & Pasupathi, 2012, for a review).

Interventions

Given the importance of thinking about the past, present, and future, at least two lines of research have emerged that aim to take advantage of research findings on temporal continuity to achieve certain outcomes. One of these intervention programs involves the concept of *possible selves* (Oyserman & Markus, 1990). Closely related to future orientation, possible selves are clear, positive images of who we hope to become. These images form a set of identity goals, and individuals may or may not have concrete strategies for achieving them.

Applying this research to an academic setting, Oyserman and colleagues investigated children's school-related identities, and their strategies for attaining desired future academic identities (see Oyserman & Fryberg, 2006, for a review). They found that possible school identities are most helpful when they focus on the near future, and when children are equipped with concrete strategies for achieving their desired identities. On the basis of this work, they developed interventions that go beyond eliciting students' aspirations and focus on the behavioral steps that students can take toward identity goals. Some of their recent work explores a paradox among children from lower SES backgrounds: These children tend to have high aspirations, but less success meeting their goals (Oyserman, Johnson, & James, 2011). They suggest that the crucial mediating factor between students' goals and outcomes is whether they have effective strategies for achieving their goals. Thus, thinking about the future seems most helpful for students when they have concrete steps they can take toward that future.

While Oyserman and colleagues' interventions lean heavily on future orientation, Pennebaker and colleagues have developed an intervention strategy based on the narrative approach. Their research has linked the act of constructing a meaningful, coherent narrative with a wide range of positive outcomes. For example, individuals who participated in an intervention

in which they described a traumatic personal event experienced improved long-term psychological health, increases in working memory, and even better immune function, relative to controls who described a trivial event (e.g., Pennebaker, Kiecolt-Glaser, & Glaser, 1988).

The act of developing a narrative itself seems to be the mechanism responsible for these positive outcomes, as this process provides opportunities to organize and analyze memories (Pennebaker, 1997; see also Adler, 2012, for applications to therapy). More recent work has extended this research to interventions involving descriptions of future goals, as opposed to past events (e.g., GPA, Morisano, Hirsh, Peterson, Pihl, & Shore, 2010).

KEY ISSUES FOR FUTURE RESEARCH

Our review of foundational and cutting-edge work on temporal identity integration suggests several broad areas for future research on the topic.

First, despite its theoretical importance, few studies actually assess identity integration across the past, present, and future. Even research that includes elements of all three phases of time (e.g., Zimbardo) does not assess integration. Mello and colleagues have begun to examine linkages among different elements of time, but their approach is about time itself, as opposed to the *self through time*. Accordingly, many fundamental questions remain unanswered. For example, to what degree are past, present, and future viewed as continuous representations of the self? One could have a clear sense of "me in the past" and "me in the present," but those two understandings could be disconnected from one another. Benish-Weisman (2009) demonstrated this phenomenon when discussing the fracture narrative in the context of immigration. Immigrating to a new country has the potential to cleave an individual's life into two distinct portions: the self pre-immigration and the self post-immigration. This type of discontinuity of identity is precisely what Erikson (1950) wrote about when discussing the problems faced by combat veterans returning from World War II, who experienced difficulty integrating their pre-war and post-war selves. Thus, the theoretical importance of identity integration has been clear for several decades, and yet the empirical research has not answered the theoretical call.

The advancement of research on temporal identity integration will also require researchers to dig deeper into their methodological toolbox. As implied by our preceding discussion of assessing the integration of different elements of time, future research would benefit from using *person-centered* approaches to complement the existing dominant *variable-centered* approaches. Variable-centered research focuses on the associations between two or more discrete variables. In contrast, person-centered approaches emphasize the interrelations among a set of variables within

a person. These approaches lead to qualitatively distinct configurations of variables. In the context of temporal identity integration, person-centered approaches can address two critical questions: (i) what configurations of past, present, and future are evident within a population? For example, is integration of past, present, and future the most commonly occurring configuration that individuals' possess? and (ii) what are the implications of different configurations for psychological functioning? While variable-centered approaches can assess the importance of the past, present, *or* future, person-centered approaches can lead to insights on the significance of the different configurations evident in the sample.

Longitudinal studies following individuals over a reasonable amount of time and across critical life transitions are another methodological necessity. Such studies could contribute to understanding the emergence and developmental course of temporal identity integration. Furthermore, longitudinal studies would allow for examinations of theoretically interesting temporal configurations such as people who are "stuck in the past" or have a chronic disruption in the connections between multiple phases of time.

A final fruitful methodological direction is the inclusion of mixed methods approaches to temporal identity integration. As can be seen from the cutting-edge research described previously, researchers are increasingly relying on qualitative data to understand temporal identity. These qualitative data have been analyzed both qualitatively (e.g., Mello *et al.*, 2009) and quantitatively (Pasupathi *et al.*, 2007). Regardless of how the data are analyzed, using qualitative information as the source data can move our understanding of temporal identity integration forward. Qualitative data are much more likely than quantitative data to be contextualized in individuals' lives and developmental moments, therefore allowing researchers to understand identity in action.

In addition to the conceptual and methodological directions detailed earlier, research on temporal identity integration must wrestle with two major challenges to advancement. We close this chapter by detailing two of these challenges.

The first challenge is gaining a firm understanding of the cultural nature of time, identity, and the meaning of integration. While there has been a great deal of research on the cultural nature of time and the cultural nature of identity, there has been very little on how constructions of identity through time may vary by culture. For example, is temporal identity integration itself a culture-specific ideal? Some evidence suggests it may be. For example, the temporal sequencing of narratives may be specific to Western/American White cultures, and others, such as African-Americans and Latinos, may structure their narratives topically rather than temporally (Perez & Tager-Flusberg, 1998). The available evidence, however, is scant

and methodologically flawed. Thus, a critical area for future work is to explore the cultural parameters of temporal identity integration.

Finally, a major challenge to gaining future knowledge on this topic is to integrate research across the numerous subdisciplines and conceptualizations of temporal identity. As featured in this chapter, relevant research is being conducted across developmental, social, personality, and cognitive psychology, with numerous different approaches and definitions. We used this breadth to argue that temporal identity integration is a core developmental construct. There is clearly a broad phenomenon that all are attempting to understand. While the individual trees may be relatively clear and coherent, viewing the forest as a whole leads to difficulties in synthesizing, interpreting, and drawing conclusions. Accordingly, we challenge researchers to read outside of their specialty area, incorporate diverse perspectives, and collaborate with researchers who put different perspectives in action. While there are numerous barriers to interdisciplinary collaboration (even *within* psychology), the future of our understanding depends on it. As we advocate for the importance of identity integration, we should also appreciate the value of integrating psychology across its many divides.

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