

Fall 12-1-2021

## **EMPLOYEE ENGAGEMENT AND THE ROLE OF TIME PERSPECTIVE**

Donna Valestro

Follow this and additional works at: <https://aquila.usm.edu/dissertations>

---

### **Recommended Citation**

Valestro, Donna, "EMPLOYEE ENGAGEMENT AND THE ROLE OF TIME PERSPECTIVE" (2021).  
*Dissertations*. 1957.  
<https://aquila.usm.edu/dissertations/1957>

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact [Joshua.Cromwell@usm.edu](mailto:Joshua.Cromwell@usm.edu).

EMPLOYEE ENGAGEMENT AND THE ROLE OF TIME PERSPECTIVE

by

Donna Lynne Valestro

A Dissertation  
Submitted to the Graduate School,  
the College of Business and Economic Development  
and the School of Leadership  
at The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

Approved by:

Dr. Heather M. Annulis, Committee Chair  
Dr. H. Quincy Brown  
Dr. John J. Kmiec  
Dr. Dale L. Lunsford

December 2021

COPYRIGHT BY

Donna Lynne Valestro

2021

*Published by the Graduate School*



## ABSTRACT

Employee engagement is how employees think, feel, and form intentions to decide behavioral actions. A review of related literature indicated a central tension between employees and the work environment requires psychologically adapting and adjusting to cope with their perceptions of internal and external conditions. The employee's goal is to stay as close to their authentic self as possible within the organizational environment to maintain their well-being. The psychological process comprises a temporal dimension represented as time perspective in this study. The purpose of this research is to determine if a relationship exists between employee engagement and time perspective.

This nonexperimental, cross-sectional, correlational study examined the relationship between employee engagement and time perspective. Eligible participants completed two internet-based surveys administered through Amazon Mechanical Turk. Participant eligibility criteria included employees who were 18 years or older and worked in the United States thirty-five hours or more per week and had been in their current position one year or more. The statistical analysis consisted of correlational and multiple regression analysis procedures to address the research objectives.

The findings indicate that past-positive, present-hedonistic, and future time perspective variables were significantly related to employee engagement, while past-negative and present-fatalistic were not. An increase in the past-negative orientation indicated decreased employee engagement, and present-fatalistic had no relationship with employee engagement. The multiple regression analysis showed the predictor variables

of past-positive, present-hedonistic, and future predicted 34% of the variance in employee engagement.

Exploring the psychological processes of forming an individual's mental experiences offers organizations knowledge to pursue a holistic approach in developing employee engagement, thus complementing the current employee engagement research strategies.

*Keywords:* employee engagement, time perspective, human capital development, management, well-being

## ACKNOWLEDGMENTS

Thank you to my Chair, Dr. Heather Annulis, for the many hours spent reviewing my dissertation and cheering me on. The late nights and your superpowers for organization made it all possible. To each of my committee members, thank you for your time and comments. Dr. Dale Lunsford, I want to thank you for your kind and considerate delivery of information. Dr. Quincy, thank you for your enthusiasm for teaching and your openness to my questions. Dr. Kmiec, thank you for the thoughtful and thorough conversations on my dissertation topic in helping me move forward.

A special thank you to my previous Chair, Dr. Cyndi Gaudet, for allowing me to be my authentic self while mentoring and coaching during our time together. No words can express my thankfulness for all that you have done for me. Dr. Robert Thompson, my friend and greatest supporter, thank you for cheering me on from the sidelines. And, last but not least, Dr. Brad Shuck, thank you for your quick responses and support. I will be forever grateful to you.

## DEDICATION

I want to dedicate this to my parents, although they are no longer with me. Their unconditional love, support, and dedication were immeasurable. Not a day goes by that I don't feel their presence in everything I do.

## TABLE OF CONTENTS

ABSTRACT .....	ii
ACKNOWLEDGMENTS .....	iv
DEDICATION .....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES .....	xiii
LIST OF ILLUSTRATIONS .....	xiv
LIST OF ABBREVIATIONS.....	xv
CHAPTER I – INTRODUCTION.....	1
Background of the Study .....	4
Statement of the Problem.....	11
Purpose of the Study .....	12
Research Objectives.....	13
Significance of the Study .....	14
Conceptual Framework.....	16
Human Capital Theory.....	16
Field Theory.....	16
Time Perspective Theory .....	17
Employee Engagement Theory.....	18
Delimitations.....	21



Assumptions.....	21
Definition of Key Terms.....	22
Summary.....	25
<b>CHAPTER II – LITERATURE REVIEW .....</b>	<b>26</b>
Engagement.....	26
Personal Engagement.....	28
Work Engagement .....	32
Engagement as Business Outcomes.....	34
Job and Organizational Engagement .....	35
Social Engagement.....	37
Trait, Behavioral and Psychological State Engagement.....	37
Employee Engagement .....	39
Time Perspective.....	51
Origins of Time Perspective Research.....	52
Aspects of Psychological Time.....	55
Time Perspective.....	56
Time Attitude.....	56
Time Orientation.....	57
Past-Negative .....	58
Past-Positive.....	59

Present-Fatalistic.....	60
Present-Hedonistic .....	60
Future .....	61
Balanced Time Perspective.....	63
Time Perspective Research Approaches.....	65
Time Perspective – Cognitive, Emotional, Behavioral Coping Strategies .....	68
Foundational Theories .....	71
Human Capital Theory.....	71
Field Theory.....	75
Time Perspective Theory .....	78
Employee Engagement Theory.....	79
Summary.....	80
CHAPTER III – METHODOLOGY .....	81
Research Design.....	81
Research Objectives.....	83
Variables .....	83
United States Employees .....	84
Age.....	85
Employment Status.....	86
Job Tenure.....	86

Gender.....	86
Industry .....	87
Population and Sample .....	87
Convenience Sampling .....	87
Purposive Sampling .....	88
Sample Size Analysis.....	88
Pearson’s Correlation Coefficient.....	89
Multiple Regression.....	91
Total Sample Size.....	91
Validity .....	91
Statistical conclusion validity .....	91
Power.....	92
Assumptions.....	92
Fishing and error rate .....	93
Measures .....	93
Reduced range.....	93
Unreliability of Treatment.....	94
Heterogeneity of Units .....	94
Extraneous Variance.....	94
Effect Size.....	95

Internal validity .....	95
External validity .....	95
Construct validity .....	96
Instrumentation .....	96
Zimbardo Time Perspective Inventory 15-item .....	100
Demographic Questionnaire .....	103
Validity and Reliability of the Instruments .....	105
Institutional Review Board .....	107
Data Collection .....	107
Data Collection Service .....	108
Consent to Participate .....	108
Response Rate Criteria.....	109
Data Analysis .....	110
Research Objective One.....	112
Research Objective Two through Six .....	112
Research Objective Seven.....	115
Summary .....	121
<b>CHAPTER IV – ANALYSIS OF THE DATA .....</b>	<b>122</b>
Data Collection Results.....	123
Excluded Responses.....	123

Outliers.....	123
Results of Statistical Analysis.....	124
Research Objective One.....	126
Research Objective Two.....	127
Research Objective Three.....	129
Research Objective Four.....	131
Research Objective Five.....	132
Research Objective Six.....	135
Research Objective Seven.....	137
Summary.....	143
CHAPTER V – CONCLUSIONS.....	145
Summary of the Study.....	145
Findings, Conclusions, and Implications.....	146
Finding 1.....	146
Conclusion.....	146
Recommendations.....	148
Finding 2.....	150
Conclusion.....	150
Recommendations.....	153
Finding 3.....	155

Conclusion.....	155
Recommendations.....	157
Discussion.....	159
Limitations of the Study.....	159
Recommendations for Future Research.....	160
Concluding Remarks.....	161
APPENDIX A - IRB Approval Letter.....	163
APPENDIX B - Qualtrics Survey Instrument.....	164
APPENDIX C - EES Instrument, Scoring, and Scales.....	175
APPENDIX D - ZTPI-15 Instrument.....	179
APPENDIX E - Permission to Use EES.....	180
APPENDIX F - Permission to Use ZTPI-15.....	181
REFERENCES.....	182

## LIST OF TABLES

Table 1 Choice of Coping Strategies Relative to Time Perspective Orientation.....	69
Table 2 Choice of Cognitive, Emotional, or Behavioral Coping Strategy .....	69
Table 3 Scoring Employee Engagement Scale .....	99
Table 4 Scoring Zimbardo Time Perspective Inventory-15 Scale.....	102
Table 5 Study Scoring Method of Scales.....	103
Table 6 Survey Map Aligning Research Objectives and Survey Questions.....	104
Table 7 Data Collection Plan .....	109
Table 8 Data Analysis Plan.....	111
Table 9 Continuous Variables of Pearson’s Correlation Coefficient.....	113
Table 10 Independent Variables, Dependent Variable .....	116
Table 11 Psychometric Properties for Scales.....	125
Table 12 Characteristics of Participants .....	126
Table 13 Pearson’s Correlation Past-Negative and Employee Engagement .....	129
Table 14 Pearson’s Correlation Past-Positive and Employee Engagement.....	131
Table 15 Pearson’s Correlation Present-Fatalistic and Employee Engagement.....	132
Table 16 Pearson’s Correlation Present-Hedonistic and Employee Engagement .....	134
Table 17 Pearson’s Correlation Future and Employee Engagement .....	136
Table 18 Correlations.....	140
Table 19 Variance Inflation Factors for Multicollinearity.....	140
Table 20 Model Summary .....	141
Table 21 ANOVA.....	142
Table 22 Correlation Coefficients.....	142

## LIST OF ILLUSTRATIONS

Figure 1. Conceptual Framework .....	20
Figure 2. Scatterplot between past-negative and employee engagement .....	128
Figure 3. Scatterplot between past-positive and employee engagement .....	130
Figure 4. Scatterplot between present-fatalistic and employee engagement .....	132
Figure 5. Scatterplot between present-hedonistic and employee engagement .....	133
Figure 6. Scatterplot between future and employee engagement .....	136
Figure 7. Scatterplot of residuals to test linearity and homoscedasticity.....	138
Figure 8. Normal P-P Plot with time perspective predicting employee engagement .....	139
Figure 9. Normal Q-Q Plot of Studentized Residuals.....	139



## LIST OF ABBREVIATIONS

<i>EES</i>	Employee Engagement Scale
<i>IRB</i>	Institutional Review Board
<i>F</i>	Future
<i>PF</i>	Present-Fatalistic
<i>PH</i>	Present- Hedonistic
<i>PN</i>	Past-Negative
<i>PP</i>	Past-Positive
<i>USM</i>	The University of Southern Mississippi
<i>ZTPI-15</i>	Short Zimbardo Time Perspective Inventory

## CHAPTER I – INTRODUCTION

Deloitte Insights *2020 Global Human Capital Trends* survey reports 73% of business and human resource leaders propose organizations as the entity in society primarily responsible for workforce development. Even “outranking the responsibility” of the employees’ role and “far exceeding the deemed responsibility of educational institutions, governments, or professional associations and unions” (Deloitte Insights, 2020, p. 74). Successful organizations understand the benefits of developing human capabilities for the workforce through employment, resulting in positive individual and organizational outcomes (Deloitte Insights, 2020; Lenderman, 2018; Lopez et al., 2019; The Conference Board, 2020; Turner, 2020). However, in the present economic climate, technological advances, shifts in demographics, and workforce changes affecting the work setting create challenges in developing the workforce for both the organization and its employees (Bureau of Labor Statistics, 2021; Turner, 2020; Vial, 2019; Webster & Ivanov, 2020).

The organizational complexities arising from forces impacting the workforce require employees to continuously adapt to new environments with greater demands (Claus, 2019; Deloitte Insights, 2020; Fleming, 2017; Morgan, 2017; Turner, 2020). The pressure creates traumatic experiences for employees, manifesting as workplace stress (Foy et al., 2019; Okkonen et al., 2019; Petkovic & Nikolic, 2020; Turner, 2020, p. 188). The American Psychological Association (2018, 2020) reports, in the United States, people with workplace stress rose from 64% of the workforce in 2018 to 70% in 2020.

Workplace stress drains the economy and presents high costs to organizations (Hellebuyck et al., 2017). Additionally, stress causes physical and mental health

problems diminishing an employee's psychological abilities to engage (Bourdon et al., 2020; Eddy et al., 2017; Goetzel et al., 2018; Hanson et al., 2017; Hellebuyck et al., 2017; Ipsen et al., 2020; Petkovic & Nikolic, 2020; Pfeffer, 2018; Rastogi et al., 2017), affecting motivation and productivity (Shuck et al., 2015). The high levels of workplace stress signify the importance of creating human capital initiatives to meet the needs of both the organization and the individual (American Psychological Association, 2020; CISCO, 2020; Deloitte Insights, 2020; Turner, 2020). Deloitte Insights (2020) reports 96% of the business and human resources leaders from 115 countries believe well-being is the company's responsibility; therefore, how an employee experiences the work environment requires attention.

To meet these challenges, organizations prioritize engagement and the employee experience (Deloitte Insights, 2020; The Conference Board, 2020; Turner, 2020). Employee engagement is a "positive, active, work-related psychological state operationalized by the maintenance, intensity, and direction of cognitive, emotional, and behavioral energy" (Shuck, Osam, et al., 2017, p. 269). Engaging "causes less stress, more creativity, and profitability" (Shuck, 2019, p. 59). Shuck and Reio (2014) report employees with high levels of engagement display increased psychological well-being. Employee experience is "the intersection of employee expectations, needs, and wants and the organizational design of those expectations, needs, and wants" to create a favorable environment (Morgan, 2017, p. 8). Employee engagement considers the psychological experiences and how individuals form intentions to engage or withdraw personal resources (Kahn, 1990, 1992, 2010). Employee experience encompasses the physical or external environment created by the organization, such as flexible work arrangements,

shortened work week, chat rooms, and physical workspace designed for employee well-being (Deloitte Insights, 2020; Morgan, 2017; Turner, 2020).

Psychological engagement is primarily a feature of the individual's nature and internal willingness to become engaged (Shuck, 2019; Turner 2020). However, how individuals experience the workplace “is subjective because human beings have emotions, different perceptions, attitudes, and behaviors” (p. 9). Without understanding an individual’s psychology, the difficulty remains in designing the environment and creating strategies to develop employee engagement (Deloitte Insights, 2020; Morgan, 2017; Shuck, 2019; Turner, 2020).

Employee engagement's psychological state emerges through the employee's interaction and perception of the work environment (Imperator, 2017; Joo et al., 2017; Kahn, 1990; Shuck, 2019; Turner, 2020). An employee’s internal perception of psychological and external experiences shapes how one thinks and feels about the work environment and ultimately forms intentions to engage personal resources towards organizational initiatives (Shuck, 2019; Shuck & Reio, 2011; Shuck et al., 2018). However, no two individuals share the same perception or process internal or external events in the same way or with the same outcome (Bailey et al., 2018; Bianchi, 2018; Bonano & Burton, 2013; Kahn, 1990; Lee et al., 2020; Marrow, 1969a; Marrow, 1969b, Medrano & Trogolo, 2018, Nimon & Zigarmi, 2015; Shuck, 2019). Time plays a role in how one perceives events (P. Zimbardo & Boyd, 1999).

The research defines time perspective as an “often-nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories or time frames that help to give order, coherence, and meaning to those events” (P.

Zimbardo & Boyd, 1999, p. 1271). Time perspective suggests memories and thoughts of future expectations influence present moment perceptions, emotions, and actions (P. Zimbardo & Boyd, 1999). An analysis of an individual's temporal structuring, or rather the intensity of specific features of the time perspective construction, is an "important source of knowledge about that" individual (Sobol-Kwapinska & Jankowski, 2016, p. 1512). Time perspective may add knowledge to understanding the process of forming intentions to positively influence one's work environment's perception (Bowles, 2018; Stolarski & Witowska, 2017). Empirical data supports the claim that time perspective may influence a majority of human behaviors and psychological states and has numerous clinical and practical applications (Bowles, 2018; Boniwell & Osin, 2015; Kostic & Chadee, 2017; Nuttin & Lens, 1985; Ortuno & Cordeiro, 2013; Stolarski, Fieulaine, & Van Beek, 2015; Strathman & Joireman, 2015; P. Zimbardo & Boyd, 2008; P. Zimbardo & Sword, 2017).

### Background of the Study

Three decades of scholarly research regarding engaging the workforce offers various constructs differing in theoretical frameworks, definitions, names, and measurement tools (Bailey et al., 2017; Kahn, 1990; Imperatori, 2017; Motyka, 2018; Saks & Gruman, 2014; Shuck, 2019; Turner, 2020; Truss et al., 2014). Similarly, well-known practitioner research differs (Aon Hewitt, 2017; Gallup, 2021; Quantum Workplace, 2020; The Predictive Index, 2019; Willis Towers Watson, 2018).

George (2009) claims engagement research asserts the more engagement, the better. Macey and Schnieder (2008) point out that engagement definitions propose high levels are a desirable state. Other researchers suggest if engagement levels are too high,

an undesirable condition occurs (George, 2011; Korner et al., 2012; MotiveX, 2017; Purcell, 2014; Welbourne, 2011). Being overly engaged may potentially harm the individual or organization (George, 2011; Macey & Schneider, 2008; Moeller et al., 2018; Schaufeli et al., 2008; Van Beek et al., 2012). Macey and Schneider (2008) argue that people cannot expend their energies at the highest levels without recovery. George (2011) asserts that high engagement levels require sacrificing areas outside of work, such as home life, affecting their well-being. Additionally, Moeller et al. (2018) claim individuals with high engagement levels suffer high levels of burnout. Those individuals experiencing burnout distance themselves from their work roles (Van Beek et al., 2012). Moreover, key participants vary in perspectives on the primary goal necessary to develop engagement (e.g., individual, team, or organizational level) (Jeske et al., 2017; Khodakarami et al., 2018; Saks, 2017; Turner, 2020).

Over the last five years, efforts to explain the relative impact of organizational strategies to increase engagement recognize work stress as negatively affecting employee well-being (Frith, 2017; Gray, 2016; Hellebuyck et al., 2017; Korn Ferry, 2020; Imperatori, 2017; Shanafelt & Noseworthy, 2016; van Mol et al., 2018). Others suggest engagement programs serve as a quick-fix (Maltese, 2018; Ready, 2019), and companies fail to act on engagement survey data causing employees to resent responding to surveys where no action or sharing of results occurs (Ready, 2019; MotiveX, 2017). Additionally, companies highlight employee engagement as a human resources initiative causing other departments to disregard or fail to follow through on engagement initiatives (Maltese, 2018). However, the numerous definitions, measurements, and multi-level focus (e.g., individual, team, or organization) make it challenging to transfer into a practical

application (Bailey, 2016; Bailey et al., 2017; Christian et al., 2011; Saks, 2017; Saks & Gruman, 2014; Shuck, 2019; Turner, 2020). For instance, creating and implementing engagement training, interventions, or initiatives that are most effective for the organization and meaningful for employees continues as a challenge (Anthony-McMann et al., 2017; Jeske et al., 2017; Keenoy, 2014; Saks & Gruman, 2014; Saks, 2017; Shuck, Osam, et al., 2017, Turner, 2020).

Nonetheless, the vast body of engagement literature confirms the positive outcomes of engagement as a source of well-being, positive attitudes at work, and antecedents of business success (Harter et al., 2002; Imperatori, 2017; Saks & Gruman, 2014; Xanthopoulou et al., 2012). Scholars and practitioners agree engaging the workforce provides numerous benefits for the individual and the organization (Aon, 2018; Bailey et al., 2017; Gallup, 2021; Imperatori, 2017; Saks & Gruman, 2014; Shuck, 2019; Shuck, Osam, et al., 2017). Engaged employees suffer less from stress and work more positively, which improves organizational culture and performance (Buric & Macuka, 2018; Hazelton, 2014; Shuck, Adelson, & Reio, 2017). Stress, work-related or a person's life outside of work, causes increased employee disengagement and a decline in employee productivity and workplace performance (Voci et al., 2016). Guest (2018) and Pfeffer (2018) report that organizational performance and employee well-being are connected, each playing a role. Thus, organizations desire an engaged workforce (Turner, 2020). “Examining employee engagement at the micro-individual level is a win-win approach in both the employee and organizational perspectives” (Imperatori, 2017, p. 38).

Current engagement initiatives rely on an employee choosing to engage with the work environment (Deloitte Insights, 2019; Morgan, 2017; Shuck, 2019; Turner, 2020) without understanding how employee engagement develops or translates into practice (Shuck, 2019). The current reliance on external methods in motivating an employee to engage at work has a low return rate (Imperatori, 2017; Morgan, 2017; Shuck et al., 2018; Turner, 2020). Studies suggest investigating holistic approaches to increase and sustain employee engagement by including employees' subjective experiences and the strategies external to the individual (George, 2010; Imperatori, 2017; Kaiser & Schulze, 2018; Morgan, 2017; Turner, 2020).

Engagement research commonly uses the term employee engagement for numerous engagement constructs. However, the construct of employee engagement is an active, work-related positive psychological state operational through the strength and proportional focus of cognitive, emotional, and behavioral energy (Shuck, Osam, et al., 2017). As a psychological state, being engaged in the work setting is internal decision-making at the individual level (Shuck, Osam, et al., 2017; Shuck & Wollard, 2010; Wollard & Shuck, 2011). Thus, central to employee engagement is the individual as a human being (Kahn & Heaphy, 2014; Shuck, 2019).

With organizations in the United States spending 83 billion dollars on training (Mazareanu, 2019) and considering high workplace stress levels, determining the most effective human capital initiatives remains crucial to organizational success (Weiss, 2018). As organizations engage the workforce, a need exists to pursue initiatives that stimulate an employee's potentially underutilized personal resources (Patel et al., 2017), such as sustainable psychological levels (Graffigna, 2017; Lee et al., 2020).



Some workplaces remain more stressful than others leading to normalizing disengagement, while particular individuals remain more resilient (Kahn, 2019; Wollard, 2011). Organizations may or may not have a system for interventions, while others could worsen stressful situations (Wollard, 2011). Consequently, employees require psychological abilities to flourish to ensure organizational success (Schaufeli, 2014).

Shuck (2019) suggests exploring how employees think about work's meaning, safety and how they form intentions to behave positively towards work tasks. The underlying constructs remain a challenge to measure and track because the decision to engage at work relies on an employee's interpretation of the environment (Morgan, 2017; Shuck, 2019, p. 77; Shuck & Reio, 2011). Studying how an employee thinks remains a subjective approach in line with the call to research human automaticity and human beings' nonconscious processes' role when examining engagement constructs or human behavior in its setting (Eldor et al., 2017; George, 2009, 2010, 2011; Lewin & Cartwright, 1951).

The importance of nonconscious processes and human automaticity reduces complexity at the level of conscious processing. The process allows the brain to select from everything learned through internal and external experiences into what is necessary to create a meaningful conscious understanding of one's present circumstances (Dresp-Langley, 2012; Kahn, 1992; Schiffer, 2019). The guiding assumption of Kahn's (1990) study comprises the claim that "people are constantly bringing in and leaving out various depths of their selves during the course of their workdays" to express or defend themselves (p. 693-694) upon the nonconscious assessment of the meaningfulness, safety, and psychological availability within the work environment (Kahn, 1992).

According to William Kahn's (1990, 1992) seminal studies of personal engagement and disengagement, this process comprises a temporal dimension whereby being fully present in the moment requires referring to the past and future in shaping the immediate understanding of the present moment. Individuals engage or withdraw proportionate to their cognitive, emotional, and behavioral energy to protect themselves and their well-being (Kahn, 1990; Shuck, Osam, et al., 2017). The process's significance remains a psychological effort to stay as close to their authentic self as possible within the organizational environment by adapting and adjusting to the environment (Khan, 1990, 1992).

Research confirms little knowledge about how engagement develops in practice and which human capital investments stimulate internal motivation to apply or withdraw personal resources to engage at work (Anthony-McMann et al., 2017; Jeske et al., 2017; Keenoy, 2014; Saks & Gruman, 2014; Shuck, 2019; Shuck, Osam, et al., 2017). A starting point in understanding how engagement develops begins with understanding how an individual psychologically experiences the work environment and the influences affecting intentions to engage or withdraw personal resources (Imperatori, 2017; Kahn, 1990, 1992; Lee et al., 2020; Shuck, 2019).

Field theory proposes a differentiating aspect of how one psychologically processes internal and external events: an individual's time perspective (Frank, 1939, Lewin, 1935, 1936). Time perspective theory is the knowledge that our memories and thoughts of future expectations influence our present moment perceptions, emotions, and actions (P. Zimbardo & Boyd, 1999). The psychological processing of memories and

future expectations in the present moment is unique to the individual and central to employee engagement (Kahn, 1990, 1992; Shuck, Adelson, & Reio, 2017).

The construct of employee engagement relates to an employee's psychological experiences in the work setting (Shuck, 2019). This study focuses on how employees psychologically engage in the work environment considering an individual's time perspective. Both employee engagement and time perspective literature support the role of cognitive processes as a significant factor influencing the meaning, or mental representation, derived from environmental events and formulating intentions for an individual to behave in a specific manner (Bolotova & Hachaturova, 2013; Nimon & Zigarmi, 2015; Shuck, Adelson, & Reio, 2017; P. Zimbardo & Boyd, 1999). This study explores the potential relationship between employee engagement and time perspective.

Previous management research examines the individual's temporal influence relative to work and the organization (Shipp, 2015; Shipp & Aeon, 2019; Shipp & Fried, 2014a; Shipp & Fried, 2014b); such as managerial strategies (Kaplan & Orlikowski, 2013), unfair treatment (Cojuharenco et al., 2011) and employee downtime (Kaplan et al., 2018). Additional study's focus on the implications of the temporal direction of the organization (Levasseur et al., 2020; Shipp et al., 2009), temporal intricacies of job engagement through the perception of fit and organizational identity (Hernandez & Guarana, 2018), and supervisor team fit in the past temporal direction of supervisors' leadership behaviors (Briker et al., 2020).

Previous research on individual time perspective focuses on motivational and goal-oriented aspects of future time perspective, leaving out the past and present temporal frames (Andre et al., 2018; Froehlich et al., 2015; Henry et al., 2017; Kooij et al., 2017;

Kooij et al. 2018; Nuttin & Lens, 1985; Rudolph et al., 2018; Taber, 2013; P. Zimbardo et al., 1997). Work engagement studies examining the role of future time perspective explore employee goal orientation, job crafting and job performance (Kooij et al., 2017), affective commitment on work engagement (de Guzman & Dumantay, 2019), job performance and support (Barbieri et al., 2016), age discrimination at work (Vuori et al., 2019), achievement goals (de Lange et al., 2008), employee characteristics supporting organizational behaviors (Wojtkowska et al., 2019) and career variables (Taber, 2013). Hence, the focus of these studies consists of work activity, the work tasks, and one aspect of an individual's time perspective, the future. This research specifically examines the influence of an individual's time perspective, each independent orientation and multi-temporal assessment, and its potential relationship to the psychological state concept of employee engagement. The goal remains to explore how the psychological state of employee engagement forms.

#### Statement of the Problem

Ideally, existing organizations create human capital strategies to improve employee engagement and create a work experience employees find favorable (Morgan, 2017). An employee's positive perception of work experiences forms positive intentions to contribute to an organization's success and well-being. However, experiences remain subjective and require an organizational understanding of the psychological factors influencing an individual to engage, thus gaining insight into how employee engagement develops and which initiatives work best to ignite internal motivation (Shuck, 2019; Shuck et al., 2018; Turner 2020).

In reality, organizational strategies to improve employee engagement are not creating a work environment that employees perceive as favorable, evidenced by the approximately two-thirds of disengaged employees in the U.S. labor force, which hinders overall organization profitability and employee well-being (Harter, 2021; Johnson et al., 2018; Rastogi et al. 2017; Robertson & Cooper, 2009; Schaufeli et al., 2008; Shuck & Reio, 2014). Shuck (2019) argues that researchers and practitioners must understand how the subjective experience of employee engagement develops. Thus, psychological factors influencing employees' perceptions require additional exploration (George, 2010; Imperatori, 2017; Morgan, 2017; Turner, 2020).

Consequently, the workforce will suffer from diminished employee engagement without understanding the psychological conditions necessary for employees to engage. These conditions reduce organizational performance and employee well-being (Bailey et al., 2015; Harter & Stone, 2012; Rastogi et al., 2018; Rich et al., 2010; Shuck, 2019; Shuck et al., 2011; Shuck, Adelson, & Reio, 2017; Turner, 2020; Xanthopoulou et al., 2009). Employees may continue to withdraw their personal resources necessary for employee engagement in the work environment (Kahn, 1990, 1992).

### Purpose of the Study

The purpose of this study is to determine the relationship between employee engagement and an individual's time perspective. The basis of employee engagement involves the individual's personal psychological experience and the distinctive interpretation of the work setting (Khan, 1990,1992; Shuck, 2019; Shuck & Reio, 2011; Shuck & Wollard, 2010). The study examines time perspective as the temporal influence in how employees develop their psychological state of engaging or withdrawing personal

resources (Kahn, 1992). Exploring the psychological processes forming an individual's experiences offers organizations knowledge to pursue a holistic approach in developing employee engagement, thus complementing the current engagement research strategies external to the individual (Imperatori, 2017; Kaiser & Schulze, 2018; Morgan, 2017; Turner, 2020). A review of the current literature supports a potential relationship between the variables.

### Research Objectives

The research objectives describe what the research is trying to achieve and stem from a relevant literature review. Specifically, RO1 describes the demographics, RO2 – RO6 determines an individual's level of attention to particular time orientation and its relationship with employee engagement. Also, RO7 determines the predictive association between employee engagement and time perspective.

*ROI:* Describe the demographic characteristics of participants by age, job tenure, gender, and industry.

*RO2:* Determine the relationship between past-negative time perspective and employee engagement.

*RO3:* Determine the relationship between past-positive time perspective and employee engagement.

*RO4:* Determine the relationship between present-fatalistic time perspective and employee engagement.

*RO5:* Determine the relationship between present-hedonistic time perspective and employee engagement.

*RO6:* Determine the relationship between future time perspective and employee engagement.

*RO7:* Determine the relationship between the orientations of time perspective and employee engagement.

### Significance of the Study

A study's significance describes the importance of the problem for different groups that may profit from reading and using the research (Creswell & Creswell, 2018). This study may provide new understandings of employee engagement for human capital development professionals, managers, organizational development professionals, employees, and practitioners. The cyclical process of psychological effort to stay as close to one's authentic self as possible within one's work role comprises a temporal dimension in situational moments, which requires unconsciously referring to the past and future to shape the immediate understanding of the present (Khan, 1990, 1992). Fletcher (2017) provided suggestions to explore the implications of human capital research approaches regarding the temporal nature of engagement and coping strategies to help employees navigate the boundaries of work and non-work roles. This study may contribute new knowledge to the employee engagement literature by examining the temporal dimension through the theoretical lens of time perspective, thus providing a new understanding of the employee engagement theory, literature, and measurement.

Additional research suggests objective time must complement subjective time (Eldor et al., 2017; Morgan, 2017; Turner, 2020). Kahn's (1990, 1992) seminal studies of engagement reflect the conscious and unconscious phenomena and the objective properties of the work context. The unconscious processes and human automaticity allow

the brain to select from everything learned through internal and external experiences into what is necessary to create a meaningful conscious understanding of one's present circumstances (Dresp-Langley, 2012; Kahn, 1992; Lewin, & Cartwright, 1951; Schiffer, 2019). The benefits of psychological engagement center on the assumption that most behaviors in organizations result from employees' conscious forethought. However, an individual's behavior starts unconsciously, and the nonconscious process serves as the default (Dijksterhuis, 2007; Lewin, 1951). George (2009) asserts automatic responses drive work-related behaviors. George (2009) further claims most human behavior is unconscious and that "nonconscious thoughts and feelings are the primary drivers of reactions and behaviors" (p. 1318), suggesting a more realistic representation of the mind and human functioning. Dijksterhuis and Aarts (2010) and Wilson (2002) propose the most beneficial behavior for employee engagement is goal-oriented behaviors, often automatically initiated by nonconscious processes. As a subjective experience, employee engagement does not physically manifest as behavior but psychologically forms as an intention to take action in a specific direction towards meeting needs and goal attainment (Shuck, Adelson, & Reio, 2017; Shuck & Wollard, 2010). Since automaticity plays a dominant role in behavior, engagement researchers should consider the nonconscious role (George, 2009). Thus, the variable of time perspective offers a look into the temporal dimension, calibration-in-role, and the unconscious cognitive processes of employee engagement that may predict human behavior and decision-making relative to deciding to engage at work.



## Conceptual Framework

The conceptual framework provides the research study's underlying structure, orientation, and viewpoint (Merriam & Simpson, 1995). The scope of the study shows the interrelated elements, constructs, variables, proposed relationships, and posited outcomes (Roberts, 2010; Robson, 2011). The four theories of human capital, field, time perspective, and employee engagement shape this study's framework to build and support the research objectives (see Figure 1; Grant & Osanloo, 2014). The following section explains the four theories beginning with human capital.

### *Human Capital Theory*

The human capital theory considers an individual's capabilities to generate significant returns for individuals, organizations, and society (Becker, 1964; Mincer, 1958, 1962; Schultz, 1961). The theory proposes developing human capabilities through employment, education, training, and health (Becker, 1993). In addition, the concept supports the value of innate or acquired abilities and individuals' psychology as developing through organizational initiatives (Becker, 1993; Kell et al., 2018). The following section explains field theory.

### *Field Theory*

Field theory examines patterns of interaction between an individual and the environment, emphasizing the influences and interrelations of perception, experience, and behavior (Hergenhahn & Henly, 2014). Of central importance is analyzing the subjective temporal dimensions of past and future expectations in explaining human cognition and behavioral intention in the present. The psychological theory proposes memories of the past, and future expectations, as always active in the present moment when shaping intent

in a particular direction (Lewin & Cartwright, 1951). Subjective experiences emanate from the mind, and no two individuals process experiences in the same way. The field theory identifies the most differentiating factor among individuals developing their unique interpretations: an individual's time perspective (Frank, 1939, Lewin, 1935, 1936; Marrow, 1969a; Marrow, 1969b). Intentions arise from a given time perspective to ensure a particular behavior in the future with expectations of satisfying one of many needs (Lewin, 1946). The intention changes to match the environment, with a new act emerging from the psychological system supporting the original goal (Lewin, 1935, 1940, 1946). The construct of a tension system lies within an individual and the outside pressures stemming from the surrounding environment (Lewin, 1946). The following section explains time perspective theory.

#### *Time Perspective Theory*

The theory of time perspective proposes one's views of time influence an individual's perceptions, emotions, and actions (P. Zimbardo & Boyd, 1999). Time perspective includes the continual nonconscious flow of personal and social experiences that partition experiences into temporal categories of the past, present, and future. The time-based classifications include five orientations: (a) past-negative, (b) past-positive, (c) present-fatalistic, (d) hedonistic, and (e) future. The organization of the subjective internal and external experiences helps "give order, coherence, and meaning to those events" (P. Zimbardo & Boyd, 1999; p. 1271). The final theory included in this literature review is employee engagement theory, and the following section explains the concept.

### *Employee Engagement Theory*

The basis for employee engagement theory is the individual's unique and varying psychological experience and interpretation (Jhangiani et al., 2014; Kahn, 1990, 1992; Shuck, 2019; Shuck & Wollard, 2010; Welbourne et al., 2007). This interpretation occurs through how individuals think (cognitive engagement) and feel (emotional engagement) about the work environment. An individual's internal analysis determines the direction of intentions to behave (behavioral engagement) in a particular manner in the work setting (Shuck, 2011, 2019; Shuck, Adelson, & Reio, 2017). A favorable perception forms an intention to engage personal resources towards work tasks, while an unfavorable perception diminishes the intent to engage personal resources (Christian et al., 2011; Shuck, Adelson, & Reio, 2017; Turner, 2020). An individual's relationship with time strongly affects an individual's perception in a specific temporal direction (P. Zimbardo & Boyd, 1999). Perception is the nonconscious process by which one assesses, selects, organizes, and interprets information into meaningful patterns, constructing useful mental representations of the psychological environment to formulate an appropriate behavioral response (Carpenter & Huffman, 2013; Levine & Shefner, 1981).

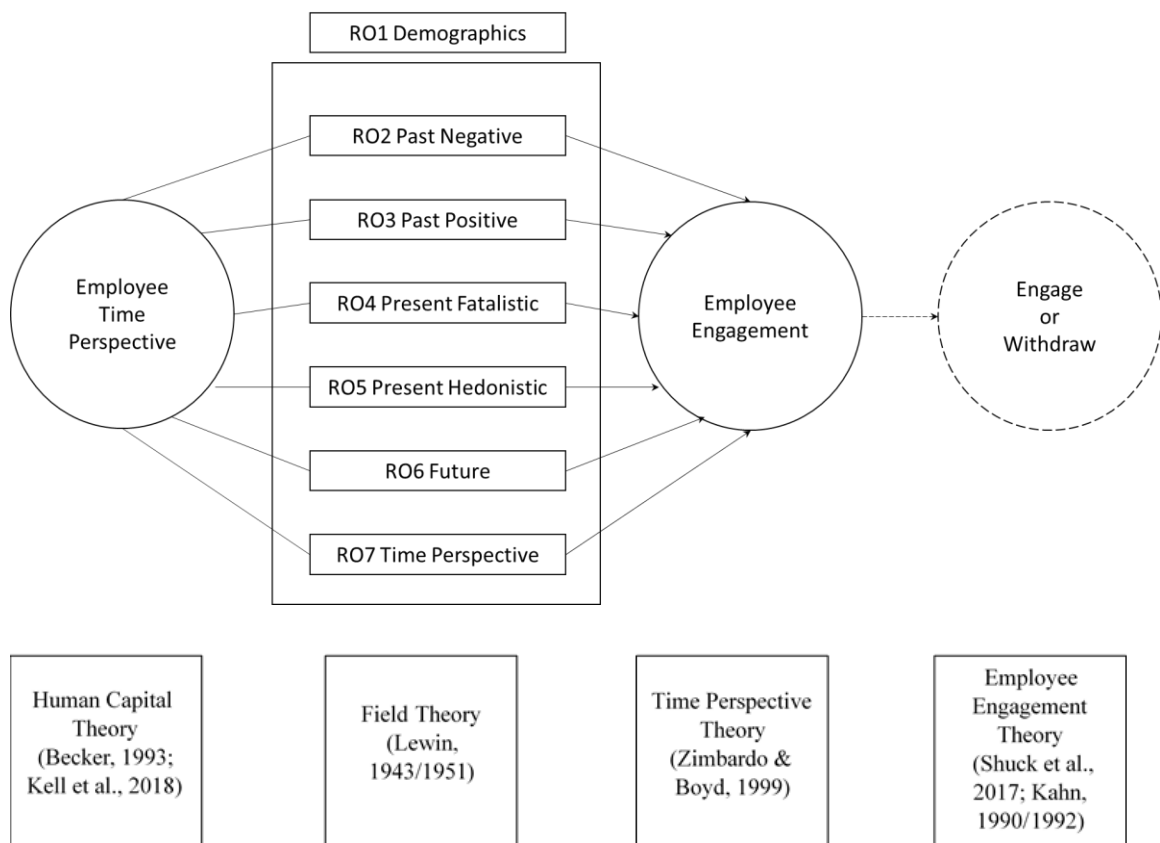
This study's conceptual framework illustrates measuring the associated relationship between two variables, employee engagement and time perspective (See Figure 1). The first research objective requires collecting demographic information from survey participants. Research objectives two through six include measuring the relationship of each orientation of time perspective with employee engagement as a potential orientation or habitual focus and attitude. The last research objective, number seven, measures the relationship of time perspective with employee engagement. The

research suggests the balanced time perspective remains an idealized mental framework. A balanced time perspective allows individuals to switch between past, present, and future temporal frames depending on situational demands, resource assessment, or personal and social appraisals (Boniwell & P. Zimbardo, 2004; Boyd & P. Zimbardo, 2008; Drake et al., 2008; P. Zimbardo & Boyd, 1999).

The conceptual framework's RO1 captures the demographics of participants. In RO2 – RO6, the temporal orientations include past-negative (PN), past-positive (PP), present-fatalistic (PF), present-hedonistic (PH), and future (F). Past-negative portrays a pessimistic attitude and dislike concerning memories. Past-positive characterizes a complementary view of the past, such as exhibiting high self-esteem, happiness, and a healthy outlook on life. The belief that the future remains predestined and not influenced by an individual's actions characterizes the present fatalist view. The present hedonist emphasizes present enjoyment and excitement rather than sacrificing today for the reward tomorrow, exhibiting little impulse control. Finally, future orientation considers planning to achieve future goals and remains willing to forego in the present for future rewards and desires (P. Zimbardo & Boyd, 1999). Research shows each orientation's conceptual independence; however, the literature suggests employing measurement techniques, including the multi-temporal assessment (Ortuno, 2019). RO7 represents the multi-temporal assessment. The strength in each orientation influences the overall time perspective (P. Zimbardo & Boyd, 1999).

An individual "who cognitively assesses the work environment more favorably may operate from a more optimal and sustainable motivation in work, compared with less optimal forms of motivation (i.e., extrinsic and introjected)" (Shuck et al., 2018, p. 207).

Individuals withdraw and detach themselves from an unfavorable assessment of a situation (Kahn, 1990; Rich et al., 2010; Shuck, Osam, et al., 2017d). Therefore, affective perception shapes positive intentions of expression through behavioral engagement (Shuck, 2019; Zigarmi et al., 2009). Thus, behavioral intent remains the evident expression of cognitive and emotional engagement (Shuck & Reio, 2011). Behaviorally, an individual acting on the positive cognitive appraisal results in a willingness to invest personal resources (Shuck, Adelson, & Reio, 2017).



*Figure 1. Conceptual Framework*

Figure 1 illustrates employee engagement as a process. The work environment cognitive assessment remains a psychological evaluation regarding the current environment, the impact of past work experiences and future expectations, the emotional

reaction, favorable or unfavorable, effects perception to engage or withdraw personal resources directed towards the forthcoming intentional behavior. The assessment determines if the factors affect the sense of well-being and ignite or diminish intentions to engage (Lazarus, 1982; Lazarus & Folkman, 1984; Nimon & Zigarmi, 2015; Shuck et al., 2018; Zigarmi & Nimon, 2011).

### Delimitations

Delimitations remain a conscious choice by the researcher to control certain factors by setting parameters narrowing the paper's scope since research studies cannot address all relevant elements (Mausch & Birch, 1998). Delimitations set parameters by the researcher's exclusionary and inclusionary decisions to set limits the scope (Creswell & Creswell, 2018). The delimitations in this study include: (a) the exclusion of examining for unknown external influences (e.g., an individual's promotion, organizational restructuring, economic conditions), and (b) not distinguishing between job titles, role, salaries, level of education, and cultural differences. Future research may study those areas not contained within this study; however, this investigation's purpose remains to determine the relationship between employee engagement and time perspective as human beings.

### Assumptions

Assumptions consist of what the researcher takes for granted concerning the study (Roberts, 2010). This research assumes: (a) all participants have the potential to engage in the work environment, (b) all participants responding to the survey remain willing and truthful, (c) all participants can understand the survey questions, and (d) the quantitative correlational methodology is appropriate for the study.

## Definition of Key Terms

The following definitions clarify terms relative to this study, including specific or unique meanings within the research context or explain terms not widely known or understood (Simon & Goes, 2015). The following definitions guide this study.

1. *Affect*. Any experience of feeling or emotion people experience involving the appraisal of an event as positive or negative (Lopez et al., 2019).
2. *Balanced time perspective*. An individual can switch effectively among time perspective orientations relevant to task features, situational deliberations, and personal resources, rather than a bias towards a specific time perspective orientation that is not adaptive across situations (P. Zimbardo & Boyd, 1999).
3. *Coping*. The psychological process of continually changing cognitive and behavioral efforts to manage stress associate with internal and external demands appraised as taxing or exceeding the individual's available resources through emotion-focused or problem-focused strategies (Lazarus & Folkman, 1984).
4. *Cognitive cycle*. "The repeated cycle of perception, understanding and action selection" (Madl et al., 2011, p. e14803).
5. *Employee engagement*. The term employee engagement is a "positive, active, work-related psychological state operationalized by the maintenance, intensity, and direction of cognitive, emotional, and behavioral energy" (Shuck, Osam, et al., 2017, p. 269).
6. *Engagement literature or engagement research*. Various "engagement terms have been used interchangeably with employee engagement" (Shuck, Osam, et al.,

2017, p. 269). The term 'engagement literature' or 'engagement research' refers to all engagement constructs to avoid confusing readers.

7. *Intentions*. “Intentions are made, as a result of a given time perspective, to secure a certain behavior in the future expecting to bring nearer the fulfillment of one or several needs” (Lewin, 1946, p. 368).
8. *Nonconscious (unconscious)*. The mental processes that remain inaccessible to one’s consciousness influencing judgments, feelings, or behavior (Wilson, 2002).
9. *Perceived stress*. A person's thoughts and feelings about the amount of recognizable stress at a point or range of time (Phillips, 2013).
10. *Perception*. The nonconscious process by which one assesses selects, organizes, and interprets information into meaningful patterns, constructing useful mental representations of the psychological environment to formulate an appropriate behavioral response (Carpenter & Huffman, 2013; Levine & Shefner, 1981).
11. *Personal resources*. Personal resources are “the valued characteristics proximate to the self” and differ from contextual resources located in the environment (Tement, 2014, p. 490) and serve as individual strengths or assets contributing to optimal functioning (Van den Broeck et al., 2011).
12. *Stress*. “Pressure or demand placed on an organism to adjust or adapt” (Coon et al., 2019, p. 702).
13. *Subjective experience*. Human experiences of cognitive and emotional impact as a reality in the individual mind, while the objective is the actual event that others can experience (AlleyDog.com, n.d.).



14. *Tensions*. The term tensions indicate a desirable state arising from an intention to do something satisfying a need (Marrow, 1969).

15. *Time orientation*. The relative predominance favors a specific time orientation over others (Nuttin & Lens, 1985; P. Zimbardo & Boyd, 1999). According to P. Zimbardo & Boyd (1999), the definitions of each orientation are as follows:

- (a) Past-negative (PN) tend to have a pessimistic, harmful, or aversive attitude toward the past,
- (b) Past-positive (PP) construct a view of the past as glowing, cheerful, and nostalgic,
- (c) Present-fatalistic (PF) considers the future as predestined and unmalleable by individual efforts,
- (d) Present-hedonistic (PH) orient toward enjoyment, pleasure, and excitement in the present moment with no careful thought of the outcome, and
- (e) Future (F) exhibit concern over the consequences of actions characterized by a high degree of responsibility and ability to avoid diversions from goals.

16. *Time Perspective*. The “often-nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories or time frames that help to give order, coherence, and meaning to those events” (P. Zimbardo & Boyd, 1999, p. 1271).

17. *Workplace Stress*. Disruption of an individual's cognitive-emotional-environmental system's equilibrium by external factors (Lazarus & Folkman, 1984).

### Summary

This research examines the role of an individual's time perspective as a variable influencing how employee engagement develops. The researcher examines the topic through the theoretical concepts of human capital, field, time perspective, and employee engagement to determine the role of time perspective in employee engagement. The study examines an individual's time perspective's role in explaining how an individual's perception of the work setting forms and shapes behavioral intention to take positive actions within their work role. Time perspective identifies the individuals' psychological development, thus providing vital information when developing employee engagement initiatives.

This study includes five chapters. Chapter I introduces the topic of the research and provides background information. Additionally, this chapter describes the problem and purpose, research objectives, and the significance of the research topic. Finally, this chapter discusses the conceptual framework, including delimitations, assumptions, and definitions of terms. Chapter II examines the literature relating to the research topic, and Chapter III describes the quantitative research methodology and explains the data collection plan. Chapter IV presents the analysis and findings, and Chapter V concludes with a discussion of the research study's results, conclusions, and recommendations.

## CHAPTER II – LITERATURE REVIEW

The literature review describes the research topic and theories (Roberts, 2010). The purpose of the review demonstrates the researcher's ability to interpret previous research and methodologies, identify contradictions or gaps in the literature, and explain how the paper adds to scholarly information (Hart, 2018; Jesson et al., 2011). This chapter introduces the study's topic, an overview of engagement research, a summary of time perspective literature, the foundational theories supporting the research, and a chapter summary. The following sections explain engagement constructs, definitions, approaches, and measurement instruments found in the literature.

### Engagement

The more than three decades of scholarly research about engaging the workforce consists of various constructs differing in theoretical frameworks, definitions, names, and measurement tools (Bailey et al., 2017; Kahn, 1990; Imperatori, 2017; Motyka, 2018; Saks & Gruman, 2014; Shuck, 2019; Truss et al., 2014; Turner, 2020). Similarly, practitioner research differs likewise (Aon Hewitt, 2017; Gallup, 2021; Quantum Workplace, 2020; The Predictive Index, 2019; Willis Towers Watson, 2018). The review begins with Shuck's (2011) paper, *Four Emerging Perspectives of Employee Engagement*. The article summarizes the four main approaches in developing engagement: (a) Kahn's (1990) needs-satisfying, (b) Maslach et al.'s (2001) burnout-antithesis, (c) Harter et al.'s (2002) satisfaction-engagement, and (d) Sak's (2006) multidimensional (Shuck, 2011). The four leading research approaches present various research paths.

The first method, Kahn's (1990) needs-satisfying approach, presents engagement as an internal state affected by outside environmental influences and meeting basic needs as essential in developing engagement. The study describes engaging at work as a variable covering the extrinsic and intrinsic motivational range of an individual's effort to remain authentic to themselves. No two people experience the same perception of internal and external events (Kahn, 1990).

The second method, the burnout-antithesis approach, stems from the burnout literature and surmises engagement stands as the opposite of job burnout (Gonzalez-Roma et al., 2006; Maslach et al., 2001). Burnout research began considering optimizing human strength for well-being as a proponent of engaging employees; thereby, this approach finds burnout an erosion of engagement. The term work engagement emerges through this approach (Schaufeli, Salanova, et al., 2002).

The third satisfaction-engagement approach remains the first to suggest a profit connection with engagement and explores engagement satisfaction at the business unit level (Harter et al., 2002). The research within this approach proposes successful business outcomes when implementing employee engagement initiatives as a business strategy (Arakawa & Greenberg, 2007; Asplund et al., 2015; Luthans & Peterson, 2002; Wagner & Harter, 2006; Xanthopoulou et al., 2009). As an extension of the positive psychology movement, the introduction of well-being as a significant engagement element develops through this approach (Johnson et al., 2018; Robertson & Cooper, 2009; Schaufeli et al., 2008; Shuck & Reio, 2014).

The fourth multidimensional approach proposes engaging at work develops through a social exchange model and cognitive, emotional, and behavioral elements

(Harter et al., 2002; Kahn, 1990; Maslach et al., 2001; Maslow, 1970). The approach stands as the first to suggest job and organizational engagement as independent states. This method connects drivers to consequences (Saks, 2006) and conceptualizes trait, state, and behavioral engagement (Macey & Schneider, 2008).

Engagement constructs develop through the four main approaches. Constructs include (a) personal engagement, (b) work engagement, (c) engagement as business outcomes, (d) job and organizational engagement, (e) social engagement, (f) trait, behavioral and psychological state engagement, and (g) employee engagement. The following section explains the construct of personal engagement.

### *Personal Engagement*

Kahn's (1990) article, "Psychological Conditions of Personal Engagement and Disengagement at Work," is the first engagement-like concept and describes its relationship to an individual's workplace experiences (Shuck, 2019) using a psychological and sociological perspective relative to experiential events at work (Kahn, 1990; Shuck, 2019). Kahn (1990) defines personal engagement as the simultaneous employment and expression of one's preferred self in behaviors promoting connections to work and others, personal presence (cognitive, emotional, and physical), and active, full role performances. Disengagement is the simultaneous withdrawal and protection of one's preferred self in behaviors promoting lack of connections, cognitive, emotional, physical absence, and passive, incomplete role performances (Kahn, 1990). Those psychologically present individuals "employ coping functions of partial absences" when experiencing unfavorable situations (Kahn, 1992, p. 333).

The study conceptualizes engagement at work as the “harnessing of organizational members’ to their work roles” (p. 694) by explaining the personal investment, or lack of investment, of an individual’s cognitive, emotional, and behavioral efforts express the preferred self during the work role. Preferred self means displaying one’s “identity, thoughts, and feelings” (Kahn, p. 702). The cyclical process of engaging and withdrawing cognitive, emotional, and behavioral efforts occurs while psychologically adapting or defending one’s preferred self.

Unconsciously, during the cyclical process, the psychological conditions of meaningfulness, safety, and availability must be met to engage in moments of task behaviors personally. When met or not met, the outcome shapes how one occupies a role. The individual interpretations of these conditions determine how psychologically present or absent one’s preferred self may be in a particular situational moment (Kahn, 1990).

The first condition of psychological meaningfulness includes an individual's understanding that physical, cognitive, or emotional energies matter, hence "feeling that one is receiving a return on investment" (p. 703). Lack of meaningfulness occurs when individuals perceive little room to participate in work role performance (Kahn & Fellows, 2013). The second psychological condition of safety happens when the individual feels safe to access one's preferred self without worrying about negative consequences to self-image, status, or career. Individuals trust one will not suffer by expressing the authentic self (Kahn, 1990). This therapeutic relationship with the organization imitates the clinical perspective or model (Sandler, 1960; Schein, 1987). Thus, organizations try to build environments for individuals to feel safe taking risks of self-expression and engaging the change processes (Kahn, 1990). The third psychological condition of psychological

availability includes personal confidence and capability, allowing the individual to fully invest the preferred self in work dependent on how one copes with varying demands from work and non-work facets of one's life. This condition refers to an individual's perception of available personal resources necessary to occupy the work role as the preferred self. The extent to which work and non-work challenges require varying internal resources and energy levels determines an individual's psychological availability. Psychological availability occurs when an individual has the cognitive, emotional, and physical resources in situational moments (Kahn, 1990).

Personal resources remain valued characteristics contributing to optimal functioning serving as a regulator of the situational context (Bakker & Demerouti, 2007). Individuals' internal resources remain developable and controlled by effort, including cognitive, psychological, physical abilities, and career (Lee et al., 2020). Cognitive capabilities enable the execution of mental and emotional tasks and an individual's ability to regulate emotions (Cheng, 2003; Cheng & Cheung, 2005). Mental and emotional capabilities advancing positive outcomes include psychological resources such as positive psychological capital, which comprises self-efficacy, optimism, resilience, and hope (Lee et al., 2020; Luthans et al., 2007, Luthans et al., 2015; Rand, 2018). These positive psychological resources motivate individuals to adapt to demands by outlining the circumstances more positively (Rabenu & Yaniv, 2017). The physical aspect of resources applies to an individual's actions towards promoting personal health and energy that may affect work activity, such as getting enough sleep (Airila et al., 2014; Barber et al., 2013; Kuhnel et al., 2012; Kuhnel et al., 2017).

Kahn (1990) suggests an organization's effort to ensure employees feel valuable fosters meaningfulness. Furthermore, a predictable and secure atmosphere to express one's preferred self with no adverse consequences offers safety. Thus, advancing aspects of work that create reassurance rather than deterrence cultivate an environment where an employee feels confident and capable and has the personal resources to invest (Kahn, 1990). Subsequent researchers further explore Kahn's (1990) conceptualization of engagement.

May, Gilson, and Harter's (2004) examination of Kahn's (1990) personal engagement concept proposes a significant positive relationship between engagement and the three psychological conditions essential in developing engagement. The study referred to the engagement concept as employee engagement (May et al., 2004), although there remains no clear definition (Shuck & Wollard, 2010). The study's findings propose psychological meaningfulness and safety positively link to an employee's investment in a work role, and availability has a positive relationship to resources (May et al., 2004).

Shuck (2010) and Reio and Sanders-Reio (2011) both further explore Kahn's engagement construct. Shuck's (2010) paper explores engagement antecedents of job fit, affective commitment, and psychological climate to understand how to develop engagement. The research findings report a significant relationship between the three antecedents and discretionary effort and turnover intention. Reio and Sanders-Reio's (2011) study explores supervisor and coworker incivility with engagement. The findings propose supervisor and coworker incivility has a negative relationship with safety and availability engagement. However, coworker incivility remains more harmful to safety. Supervisor incivility remains more harmful to availability. Both incivility variables were



not a predictor of meaningfulness engagement (Reio & Sanders-Reio, 2011). Kahn's (1990) construct supports the research along with the influence of Saks (2006) and Shuck and Wollard (2010).

Rich et al. (2010) further test and develop Kahn's (1990) conceptual approach, advancing the importance of Kahn's simultaneous investment of cognitive, emotional, and physical energy preferred to safeguard self in-role performance (Kahn, 1990; Rich et al., 2010). The findings propose engagement mediates relationships between value congruence, perceived organizational support, core self-evaluations, and the two job performance dimensions of task performance and organizational citizenship behavior. Although Rich et al. (2010) extend Kahn's (1990) approach, the focus remains on job activity, involvement, and satisfaction. However, employee engagement relates to the full-spectrum (e.g., work, job, team, and active work experience) of the individual's experiences (Rich et al., 2010; Shuck, Adelson, & Reio, 2017). The following section explains the construct of work engagement, where the emphasis remains on work activity and the work itself.

### *Work Engagement*

The first empirical engagement research following Kahn's (1990) study on personal engagement and disengagement appears in Maslach et al.'s (2001) article, "Job Burnout." The research discusses why an individual's stress at work develops into job burnout (Maslach et al., 2001) and increases progressively over time, becoming difficult to mend (Maslach & Leiter, 1997, p. 216). Burnout represents a psychological response to chronic personal tension on the job, inclusive of the dimensions of exhaustion, cynicism, and inefficacy (Maslach et al., 2001). However, the idea of engagement

remains "high energy, involvement, and efficacy" (p. 216). The study defines engagement as "a persistent, positive affective, motivational state of fulfillment in" an individual portraying "high levels of activation and pleasure" (p. 417). With job burnout, the employee focuses on hardships rather than being engaged in the work environment (Maslach et al., 2001).

Schaufeli et al. (2002) argue that job burnout and work engagement are opposites but claim work engagement as a distinct concept. Instead of concentrating on the negative features of job burnout, the researchers focused on the positive psychology of a worker's well-being, represented as an erosion of engagement with the job and measuring it as a separate construct. The differences in the two directions suggest engagement and burnout as opposites (Maslach & Leiter, 1997; Maslach et al., 2001). Burnout remains harmful, while work engagement remains positive (Schaufeli et al., 2002).

Schaufeli et al. (2002) subsequently examine Maslach et al.'s (2001) engagement framework with a different definition. The definition of work engagement remains "a positive, fulfilling, work-related state of mind," evidenced by "vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74). Characterizations refer to an individual's mental flexibility, enthusiasm, and involvement level at work. This approach suggests a persistent state, not a momentary one (Schaufeli et al., 2002). Unlike Kahn (1990), the conceptualization remains a static construct staying the same. Nevertheless, a limitation to the burnout approach of Maslach et al. (2001) and Schaufeli et al. (2002) shows both the definition and measure primarily focus on emotional and physical absences of burnout (Rich et al., 2010) and not on personal engagement cognitive processes recognized by Kahn's (1990) seminal research as necessary to engagement (Kahn, 1990;

Imperatori, 2017). Further, the work engagement construct focuses on work activity and tasks, not the individual (Shuck, Adelson & Reio, 2017).

Additionally, work engagement research developed The Job-Demand and Resources Model (JD-R) to understand the burnout antecedents (Demerouti et al., 2001). The JD-R model assumes every job consists of demands, such as job strain and burnout, and resources like social support, performance feedback (Bakker & Demerouti, 2007; Crawford et al., 2010; Schaufeli & Bakker, 2004). Balancing those resources has a beneficial outcome for an individual's health and well-being (Schaufeli & Taris, 2013). Concerning work engagement, the model made it possible to examine how individuals thrive at work rather than focusing on the individual (Bakker & Demouretti, 2017). Subsequently, the qualitative explorations of work engagement's everyday experiences extend the research (Fletcher, 2017; Fletcher et al., 2018). The JD-R model's potential weakness focuses exclusively on job resources while disregarding individuals' characteristics (Schaufeli & Taris, 2013). Next, the following section explains engagement business outcomes.

#### *Engagement as Business Outcomes*

The Gallup organization's study by Harter et al. (2002) presents a meta-analytic review, using the term employee engagement, and focusing on the business unit level. Including 7,939 business units and numerous disciplines, the evaluation remains the first research connecting the topic to business outcomes. The study defines engagement as an individual's involvement, satisfaction, and enthusiasm for work. Implications of the study advocate measuring employee engagement at the unit level (e.g., business units, managerial or individual unit) rather than as a variable organizational leadership can

control (Harter et al., 2002). As a result of Harter et al. 's (2002) study, interest in employee engagement increases. Additional practitioner literature (e.g., Towers Perrin, a.k.a. Willis Towers Watson, Aon Hewitt) follows and continues to pursue engagement as a significant contribution to business outcomes (Aon Hewitt, 2017; Willis Towers Watson, 2017), with each having different definitions and measurements.

Extending Harter et al.'s (2002) model, further academic research connects engagement research to successful business outcomes. Luthans and Peterson's (2002) investigation of 170 managers with an average of sixteen direct reports results in a positive relationship between employee engagement and managerial self-efficacy, suggesting an additional benefit to workplace outcomes and management training. The study's findings propose that individuals were doing what they like and what they do best with a strong sense of ownership result in the most profitable organization units. Another study's findings report a positive correlation between leadership, engagement, and performance, suggesting managers operating from a strength focus realize improved outcomes. The results highlight the significance of optimism in the workplace (Arakawa & Greenberg, 2007). However, Harter et al.'s (2002) model show weakness in not addressing the cognitive processes established by Kahn's (1990) seminal research (Kahn, 1990; Imperatori, 2017). Next, the following section explains the job and organization engagement construct, where the focus remains on employees' identification and presence toward the organization.

#### *Job and Organizational Engagement*

Saks (2006) defines employee engagement as a separate and exclusive construct consisting of cognitive, emotional, and behavioral factors associated with an individual's

role performance. The definition evolves from previous literature (Harter et al., 2002; Kahn, 1990; Maslach et al., 2001; Maslow, 1970). However, Saks (2006) proposes job and organizational engagement as employee engagement types to distinguish both as separate constructs. The study presents the social exchange theory rationale as potentially supporting why an individual's psychological condition creates responses in varying degrees of engagement and assumes reciprocity between the parties involved.

Saks' (2006) research remains the first to theorize, measure, and test antecedents and job and organizational engagement consequences. Based on Maslach et al.'s (2001) study, the research identifies job engagement as a maintainable amount of work, having options and control, suitable acknowledgment and compensation, a supportive work environment, fairness and justice, and meaningful work. Organizational engagement is the extent of an individual's psychological presence in a particular role, although referring to a commitment to the organization, organizational citizenship behavior, and satisfaction with the job. Saks' (2006) findings propose both constructs facilitate the associations between antecedents and consequences and report significant differentiation between them. For example, job characteristics predict job engagement, and procedural justice predicts organizational engagement. Job characteristics include various skills, task identity, the importance of the task, autonomy, and feedback from a job (Hackman & Oldman, 1980). Procedural justice includes the fairness of processes in the organization which determine outcomes (Lind & Tyler, 1988). Still, Saks' (2006) research provides "an important bridge between previous early theories of employee engagement, practitioner literature, and the academic community and remains the first to propose an empirical model" (Saks, 2006; Shuck & Wollard, 2010). Subsequent research revisits the

original study to update Saks' engagement model (Saks, 2019). The following section explains the social engagement construct, where the focus remains on the social aspects within the work environment.

### *Social Engagement*

Another type of engagement, social-intellectual-affective engagement (SIA), focuses on work activity and coworker alignment. Social includes the degree of social connection with the working environment and shared values with a coworker. Intellectual explains the degree to which one is intellectually engrossed in work. Affective emphasizes the extent that one experiences a state of positive affect relating to one's work role (Soane et al., 2012). Nevertheless, employee engagement comprises more than social aspects (Shuck, Adelson, & Reio, 2017). The following section explains trait, behavioral, and psychological states, where the research focuses on dispositional tendencies, work outcomes, and how individuals decide to engage in the work environment.

### *Trait, Behavioral and Psychological State Engagement*

Macey and Schneider (2008) serve as seminal researchers to conceptualize personality traits, behavioral traits, and psychological states as separate relatable concepts and operationalize employee engagement as developing from all three views. The study proposes each element represents a form of enthusiasm, attachment, or absorption. For example, trait engagement remains an optimistic view "of life and work" (p. 6) and predisposes individuals to experience things from a specific viewpoint or perspective. Traits may affect employee engagement and indirectly influence how individuals interpret the environment and subsequent actions (Imperatori, 2017; Shuck & Wollard,

2010). Although limiting employee engagement to one trait or disposition remains highly unlikely (Shuck, Osam, et al., 2017).

Behavioral engagement remains “extra-role behavior” (Macey & Schneider, 2008, p. 6). Studies demonstrate behaviors as work outcomes (Christian et al., 2011; Rich et al., 2010) and organizational citizenship behavior resulting from employee engagement (Saks, 2006). Subsequent research proposes behavioral engagement remains an internal psychological intention to behave in a particular manner rather than a work outcome and not yet behavioral (Shuck, Adelson, & Reio, 2017). Hence, behavioral engagement manifests differently from behavioral constructs (Imperator, 2017; Shuck, Osam, et al., 2017).

Psychological state engagement indicates feelings of energy and absorption and serves as an "antecedent of behavioral engagement relating to the discretionary effort" (Macey & Schneider, 2008, p. 6). Considering several definitions of engagement (Kahn, 1990; Maslach et al., 2001; Schaufeli et al., 2002), a psychological state signifies high levels of involvement in work, the organization, and displays of affective energy (Macey & Schneider, 2008). Subsequent engagement literature proposes psychological state focuses on the process of how individuals make decisions about the "maintenance, direction, intensity," and use of energy (Shuck, Osam, et al., 2017, p. 281). The following section explains the psychological state of employee engagement, where the focus remains on the uniqueness of individual interpretations of experiences and the process of how employees decide to engage.

## *Employee Engagement*

The culmination of engagement literature asserts employee engagement as a state that can “physiologically vary and fluctuate over time” (Imperatori, 2017, p. 38; Kahn, 1990; Shuck, 2019; Shuck, Osam, et al., 2017). Employee engagement continuously evolves (Shuck & Rose, 2013), “is not an overall stable trait” (Imperatori, 2017, p. 54), and relates to “some point in time” (Imperatori, 2017, p. 54; Kahn, 1992). As an experience, the psychological state remains adaptable in a particular moment (Bailey et al., 2017; Fletcher et al., 2018; Garg, 2014; Kahn & Heaphy, 2014; Saks & Gruman, 2014; Shuck, Collins, et al., 2016; Xanthopoulou et al., 2012).

The research defines employee engagement as a “positive, active, work-related psychological state operationalized by the maintenance, intensity and direction of cognitive, emotional, and behavioral energy” (Shuck, Osam, et al., 2017, p. 269). Maintenance refers to an individual’s active participation rather than passive. Intensity captures the variation of energy toward an individual’s work role according to one’s psychological interpretation of an experience or experiences (Biggs et al., 2014; Parker & Griffin, 2011; Schaufeli & Salanova, 2011; Shuck, Osam, et al., 2017). As a momentary motivational state, employee engagement remains grounded in the “interpretation of conditions” within a situation the individual experiences as meaningful, safe, and resource adequate, determining the directional outcome (Shuck, 2019, p. 15).

The conceptualization of an engaged state stands as a momentary state that fluctuates to some extent. The construct asserts individual differences influence an individual to personally engage or disengage according to the proportionate use of “varying degrees of themselves physically, cognitively, and emotionally in the roles they



perform” (Kahn, 1990, p. 692). The varying degrees fluctuate according to an individual’s assessment of each situational moment's interpretation when unconsciously determining how meaningful, safe, and available personal resources can allow immersion in the role's performance. The fluctuations remain a form of calibration or adaptation to maintain an equilibrium of well-being according to how tensions between the preferred self and the work environment's influence resolve themselves. The resolution or managing of those tensions while dealing with fluctuating internal inconsistencies and external circumstances determines how much of oneself is psychologically present in the moment. Each interpretation cycle maintains psychological boundaries between the preferred self, individual values, and roles, thus evolving as psychological presence or absence in a work role (Kahn, 1990, 1992).

Kahn (1992) further proposes psychological presence as a direct result of an individual’s confidence in the meaningfulness and safety at work and the perception of personal resources available to complete work tasks. However, the article proposes a temporal dimension relative to the cyclical process and presence in the situational moment. The study suggests being fully present signifies the person is not taken away by memories (of the past) or dreams (of the future), although both may help guide current actions (Kahn, 1992). Hence, an individual refers to the past and future to understand and shape the immediate present (Kahn, 1992).

Employee engagement focuses on an individual’s unique perceptions shaped by one’s psychological interpretation of work experiences (Kahn, 1990; Shuck & Reio, 2011) and proposes cognition and emotion as critical expressions of an individual’s cyclical psychological understanding through Kahn’s (1990) three psychological

conditions of meaningfulness, safety, and availability, forming the intention to behave in a specific direction within the work role (Kahn, 1990; Shuck, Adelson, & Reio, 2017; Shuck, Osam, et al., 2017; Shuck, Reio, & Rocco, 2011; Shuck & Wollard, 2010). Thus, expression of cognition and emotion in the present moment remains a psychological appraisal of the three psychological conditions derived from past experiences and future expectations of work experiences (Shuck, Adelson, & Reio, 2017).

Zigarmi and Nimon (2011) describe work intentions as “a set of mental representations of the behaviors an individual chooses to manifest” (p. 450). The intention is a firm plan to take action in a specific direction (Shuck, Adelson, & Reio, 2017; Shuck & Wollard, 2010; Zigarmi & Nimon, 2011). Zigarmi and Nimon (2011) describe the desired work intentions from the organizational perspective as intent to perform, remain in the organization, perform at a high level, use discretionary effort, and use organizational citizenship behaviors. Work intentions arise from the employee’s unconscious appraisal of the work environment in determining how to cope with situations and choose a course of action that ensures their well-being in the future (Bagozzi, 1992; Bandura, 1986; Lazarus, 1991; Lazarus & Folkman, 1984). However, this study focuses on the individual’s psychological process of developing their intention to engage or withdraw personal resources at work.

Employee engagement first develops cognitively and begins manifesting emotionally (Shuck, Adelson, & Reio, 2017, p. 955). The research defines cognitive as the “intensity of mental energy expressed toward positive organizational outcomes” (Kahn, 1990; Rich, 2006; Rich et al., 2010; Shuck & Reio, 2014; Shuck, Adelson, & Reio, 2017, p. 955), and emotional as the “intensity and willingness to invest emotionally

toward positive organizational outcome” (p. 955). Emotion revolves around cognitively engaged beliefs and perceptions, determining how feelings and opinions form and influence behavior (Shuck, Adelson, & Reio, 2017). Hence, cognitive and emotional remain mutually dependent. Emotional appraisals rely on continuous monitoring of mental cues (Barrick et al., 2013; Barrick et al., 2015) occurring in the setting and the appraisal's situational context (Shuck, Adelson, & Reio, 2017). Behavioral intention develops through the cyclical process of cognition’s intensity of mental energy and emotion’s strength of willingness to invest emotionally. Behavioral remains a psychological state of the intention to behave in a direction that positively affects performance and organizational outcome or both. Thus, behavioral intent remains the evident expression of cognitive and emotional engagement (Shuck & Reio, 2011).

Experiences develop the mental and emotional perspective informing final decision making to engage or not (Nimon & Zigarmi, 2015). The mental representation formed within the cognitive evaluation process serves as a primary appraisal driving and directing “emotion toward a target into a holistic, full expression of employee engagement” (Shuck, 2019, p. 31). Individuals' psychological perception influences decisions regarding the amount of energy towards organizational objectives (Schaufeli, 2012). Individuals withdraw and detach themselves from an unfavorable assessment of a situation (Kahn, 1990; Rich et al., 2010; Shuck, Osam, et al., 2017d). Therefore, affective perception shapes positive intentions of expression through behavioral engagement (Shuck, 2019, Zigarmi et al., 2009).

Within the appraisal system, the degree of Kahn’s (1990) three psychological conditions remains proportionate to an individual’s intensity to engage cognitive

resources leading to emotional (affect) and behavioral intention (Kahn, 1990; Saks & Gruman, 2014; Shuck, Osam, et al., 2017). Appraising happens inside a system framework that deliberates numerous information simultaneously advising decision-making for present behavior (Macey & Schneider, 2008; Shuck et al., 2018; Tzeng, 1975). The psychological assessments regard the current environment, the impact of past work experiences, the direction of forthcoming intentional behavior, and how the factors affect the sense of well-being at work (Lazarus, 1982; Lazarus & Folkman, 1984; Nimon & Zigarmi, 2015; Shuck et al., 2018; Zigarmi et al., 2011).

As a subjective experience, employee engagement does not physically manifest as behavior but psychologically forms as an intention to take action in a specific direction towards meeting needs and goal attainment (Shuck, Adelson, & Reio, 2017; Shuck & Wollard, 2010). Behaviorally, an individual acting on the positive cognitive appraisal results in a willingness to invest personal resources (Shuck, Adelson, & Reio, 2017). Personal resources stand as valued characteristics contributing to optimal functioning serving as a regulator of the situational context (Bakker & Demerouti, 2007). Internal resources buffer stress (Kallus, 2016) and remain positive self-evaluations linked to resilience and an individual's belief in the availability of emotional resources to successfully manage the environment (Airila et al., 2014, Kermott et al., 2019). The resources remain internal to the individual and developable by one's effort. The engagement literature identifies the types of personal resources as "cognitive, psychological, physical, and career," with little research on the cognitive and physical resources (Lee et al., 2020, p. 11).

Cognitive resources comprise an individual's mental and intellectual assets, such as self-regulation of emotions (Castellano et al., 2019; Kalokerinos et al., 2019; Kim & Kang, 2017) and mental competence (Lorente et al., 2014). Self-regulation stands as behavior reflecting feedback control helping to transform the simultaneous pursuit of various goals into a flow of actions repetitively shifting from one plan to another over time. The repetitive shifting stands as corrective internal adjustments continuously heading towards or moving away from a need or goal attainment (Carver & Scheier, 2016). Mental and emotional capabilities advance positive outcomes as psychological resources, such as positive psychological capital, which encompasses self-efficacy, optimism, resilience, and hope (Lee et al., 2020; Luthans et al., 2007; Luthans et al., 2015). These positive psychological resources motivate individuals to adapt to demands by outlining the circumstances more positively (Rabenu & Yaniv, 2017, Wadsworth, 2015). The physical aspect of resources applies to an individual's actions towards promoting personal health and energy that may affect work activity, like getting enough rest and the ability to work (Airila et al., 2014; Barber et al., 2013; Kuhnel et al., 2012; Kuhnel et al., 2017). Work experience outcomes (Gunz & Peiperl, 2007) and the ability to cope with changing work environments (Venter et al., 2013) include career resources. Examples include career identity and adaptability (Kim & Kang, 2017; Tladinyane & Van der Merwe, 2016).

Research suggests experiencing positive affects has convincing possibilities for evolving engagement theory (Ouweneel et al., 2013; Rich et al., 2010; Shuck & Wollard, 2010; Shuck et al., 2011). An individual who experiences positive emotions can draw from a broader range of behavioral responses and has a higher likelihood to experience

employee engagement (Bailey et al., 2017; Catalino & Fredrickson, 2011; Dunkley et al., 2014), while the opposite applies to a negative cognitive assessment. An extreme example includes withdrawing personal resources and quitting a job (Shuck, Adelson, & Reio, 2017). Positive emotions benefit the individual and organization for health and well-being, facilitating flourishing and improving organizational culture and performance (Buric & Macuka 2018; Catalino et al., 2014; Hazelton 2014).

Positive work environment perceptions associate with past experiences and future anticipated experiences. The more individuals positively perceive the work environment, the more internal motivation and intentions to engage personal resources (Shuck et al., 2018). An individual “who cognitively assesses the work environment more favorably may operate from a more optimal and sustainable motivation in work, compared with less optimal forms of motivation (i.e., extrinsic and introjected)” (Shuck et al., 2018, p. 207). The implications suggest a critical need to understand motivation in work environments, both intrinsic and extrinsic. Shuck et al. (2018) advocate that organizations create ideal work environments by nurturing an employee’s internal motivation rather than individuals’ unconscious incorporating of external attitudes or ideas from others or sources external to the individual.

Extrinsic and intrinsic motivation research finds “reinforcement forms of motivation fall decidedly short of relating to effective kinds of work intention” (Shuck et al., 2018, p. 205). External entities and individuals control extrinsically motivated behaviors. Introjection can also impact individuals when they resist external controls but integrate the external approaches internally without discernment. However, employee engagement remains an internal decision (Kahn, 1990; Shuck & Wollard, 2010; Wollard

& Shuck, 2011). The most effective way of forming individual motivation persists through internalized decisions (Shuck et al., 2018). Intrinsically motivated behavior is autonomous and originating from one's preferred self (Ryan, 1982). Hence, internal psychological needs regulation (intrinsic) is the most potent ideal of motivation (Shuck et al., 2018). Psychological needs regulation lessens the inner tension from managing the influence between external sources and the preferred self (Ryan & Deci, 2017).

Consequently, how individuals perpetually adapt to the preferred self and environment impacts a positive outcome. Lazarus and Folkman (1984) define psychological stress as a relationship between the individual "and environment appraised as personally significant and as taxing or exceeding resources for coping and endangering his or her well-being" (p. 19). Negative emotions may occur as a response when the individual feels overtaxed by the capability to adapt (Cohen et al., 2007). Stress at work can be beneficial in some ways. For example, a positive psychological response to a stressor may serve as a driving force in meeting work demands and deadlines (Brule & Morgan, 2018; Hargrove et al., 2013). However, severe and persistent psychological stress diminishes an individual's ability to cope (Dimsdale, 2008; Dunkley et al., 2017; Kolhaas et al., 2011; McEwen et al., 2015).

Stress is a highly personalized individual phenomenon varying among individuals, even in identical situations, for different reasons (Brule & Morgan, 2018; Lazarus, 2020; The American Institute of Stress, 2020). Chronic, uncontrollable stress can become toxic and impairs physical and mental health (Dimsdale, 2008; Dunkley et al., 2017; McEwen, 2019; McEwen & Akil, 2020; Shuck, Alagaraja, et al., 2017; Spencer-Segal & Akil, 2019). The literature conceptualizes stress as psychological stress

resulting from an individual's perception of the environment and ability to adapt to the situation (Cohen et al., 2007; Dimsdale, 2008; Taylor & Stanton, 2007; The American Institute of Stress, 2020). The brain and body adapt to daily experiences as an ongoing process, "whether we call it stressful or not" (McEwen & Akil, 2020, p. 1; Taylor & Stanton, 2007). The individual's perception of stress and coping varies among individuals (Bonanno & Burton, 2013; Dunkley et al., 2017; Koolhaas et al., 2011; Mariotti, 2015; McEwen, 2019; McEwen & Akil, 2020; Rabenu & Yaniv, 2017).

Choice of coping strategies, protective or harmful to health, influences a stressful event or situation (Dunkley et al., 2014; Holton et al., 2016; Koolhaas et al., 2011; McEwen, 2019; Spencer-Segal & Akil, 2019). Adaptive coping choices protect individuals' physical and mental health. In contrast, maladaptive coping options can be detrimental (Dunkley et al., 2014; Holton et al., 2016). Rabenu and Yaniv (2017) find the psychological variables of confidence, hope, optimism, and resilience and positively relate to coping by change and acceptance and negatively associated with withdrawal (Rabenu & Yaniv, 2017). Dunkley et al. (2014) find distinct patterns of triggers and maintenance in studying stress and coping skills between engagement and disengagement. For example, lower perceived control over the stressor relates to avoidant coping, increasing negative affect and decreasing positive distress (Dunkley et al., 2014; Dunkley et al., 2003). Kermott et al.'s (2019) study report higher resilience in the workplace environment of executives results in reduced stress, better mental health, and greater well-being. Lewis et al. (2011) report developing resilience in the workplace benefits both the employee and the organization. Problem-focused coping allows individuals to experience positive affect and control of a situation which an individual



perceives as uncontrollable (Folkman & Moskowitz, 2000). The tension associates with adaptive or maladaptive coping strategies and has different effects on individual and organizational outcomes (Rabenu & Yaniv, 2017).

As a psychological state, employee engagement arises through the individual's interaction and perception of the work environment (Imperatori, 2017; Joo et al., 2017; Kahn, 1990; Shuck, 2019; Turner, 2020). The environment has a unique quality dependent on numerous characteristics (Marrow, 1969b). An individual's perception of internal and external experiences shapes how to think and feel about work. Thus, interpretations remain unique to the individual. No two individuals share the same perception or process internal or external events in the same way or with the same outcome (Bailey et al., 2019; Bianchi, 2018; Kahn, 1990; Lee et al., 2020; Marrow, 1969a; Marrow, 1969b, Medrano & Trogolo, 2018, Nimon & Zigarini, 2015; Shuck, 2019, Shuck et al. 2018; Turner, 2020).

Thus the unique interpretations of individuals, along with the heterogeneous nature and multi-level distinction of engagement literature, make it challenging to transfer into a practical application (Bailey, 2016; Bailey et al., 2017; Christian et al., 2011; Morgan, 2017; Saks, 2017; Saks & Gruman, 2014; Shuck, 2019). Without understanding the individual's psychology, the difficulty remains in designing the environment and creating strategies to encourage employee engagement (Deloitte Insights, 2020; Morgan, 2017; Shuck, 2019; Turner, 2020). Such as designing and implementing engagement training or interventions, as well as determining the primary goal (e.g., individual, team, or organizational level) of engagement initiatives most effective for the organization (Anthony-McMann et al., 2017; Jeske et al., 2017; Kahn,

1990; Keenoy, 2014; Khodakarami et al., 2018; Saks & Gruman, 2014; Shuck, Osam, et al., 2017, Turner, 2020).

As a positive psychological state foundationally grounded in Kahn's (1990) original engagement construct, employee engagement arose from positive psychology to explore factors that drive psychological health and well-being (Bailey et al., 2015, Kahn, 1990). The design of positive psychological interventions promotes positive emotions, behaviors, or thoughts to enhance well-being and positive development (Catalino et al., 2014; Layous et al., 2014; Parks and Biswas-Diener, 2013). A literature review of positive psychological interventions suggests optimizing the psychological state involves fostering psychological resilience, cultivating subjective experiences (Chmitorz et al., 2018; Glazer & Liu, 2017; Myers et al., 2013), and building personal resources (Gilbert et al., 2018), such as encouraging individuals to have a psychological intelligence of gratitude and self-connectedness (Kaplan et al., 2014). As one example, Lenderman (2018) suggests human capital managers use practical psychological interventions through private cognitive-behavioral training. Another literature review of the same topic asserts positive interventions remain more effective when repeated many times over a sustained period (Bolier et al., 2013). Ghosh et al. (2019) report mentoring's impact on employee engagement and psychological capital, finding that "frequency of contact between mentors and mentees" influences the building of psychological capital and employee engagement (p. 37). Oishi et al. (2009) examines levels of positive emotions and suggests increasing positive emotions may have a negative outcome for the individual. An adequate level of positive emotions depends on how one defines success and available personal resources.

This study of employee engagement focuses on human beings at work and how psychological experiences shape perceptions of the work environment to engage or withdraw personal resources. Employee engagement remains a “positive, active, work-related psychological state operationalized by the maintenance, intensity and direction of cognitive, emotional, and behavioral energy” (Shuck, Osam, et al., 2017, p. 269). The construct considers the psychological process of how an employee thinks and feels about the work setting and ultimately forms intentions to engage or withdraw personal resources (Kahn, 1990; Lee et al., 2020; Shuck, 2019).

The foundational conceptualization of employee engagement remains grounded in Kahn’s (1990) seminal engagement study. The article explores how individuals psychologically occupy roles in varying degrees relative to psychological presence during particular moments of role performances (Kahn, 1990). Kahn (1992) later develops the concept more fully, proposing being fully present in one’s role performance at work evolves from a temporal dimension. Kahn (1992) defines the temporal dimension as, “To be fully present means that the person is taken away by neither memories (of the past) nor dreams (of the future), although both may guide present actions” (Kahn, 1992, p. 328). This research investigates the temporal dimension of employee engagement through the role of an individual’s time perspective and how the potential relationship may influence engaging or withdrawing personal resources.

The gap in engagement research suggests there has been little exploration “articulating how the experience develops in practice” (Shuck, 2019, p. 2) and intervention mechanisms (Sun & Bunchapattanasakda, 2019). How do individuals uniquely form the perception or mental representations of one’s work environment? What

process occurs, and how the process contributes to employee engagement literature? With these questions in mind, this researcher explores Kahn's (1990, 1992) psychological engagement construct, the foundational basis of employee engagement, and how the temporal dimension relates to the cyclical process of becoming fully present in the situational moment. Engaging in the present moment involves not being taken away by memories or dreams of the future but serving only as a guide, not a distraction, in making decisions to take action (Kahn, 1992; Shuck, Adelson, & Reio, 2017).

This study investigates the process of how one engages in the present moment by exploring the temporal dimension of time perspective and the potential relationship with employee engagement. The following section explains an individual's time perspective.

#### Time Perspective

Time perspective remains a cognitive-motivational process comprising interrelating temporal frames of the past, present, and future. P. Zimbardo and Boyd (1999) define time perspective as "the often-nonconscious process whereby the continual flows of personal and social experiences assign to temporal categories, or time frames, that help give order, coherence, and meaning to those events" (P. Zimbardo & Boyd, 1999, p. 1271). The translating and storing of those experiences' meanings inform cognitive processes influencing motivation, judgment, decisions, and actions (Seijts, 1998; Zaleski, 1996; P. Zimbardo & Boyd, 1999). The content comprises an individual's time perspective, thus influencing present behavior. The following section explains the historical origins of research relative to the time perspective.

### *Origins of Time Perspective Research*

William James (1890) is the father of American psychology. The book, *Principles of Psychology*, contains a chapter called “The Perception of Time.” In this chapter, an individual’s time perspective refers to an internal psychological perception. The study suggests individuals would have no perceptions without memories (James, 1890) and serves as the conceptual foundation of time perspective theory (Stolarski et al., 2015). When discussing the passage of time concerning an individual’s experience, James (1890, 2011) proposes knowledge of some part of the past or future, near or remote, forms our understanding of the present.

Around the same time as William James’ book, others had ideas about individuals and time relationships. French philosopher Henri Bergson (1889/2002) proposes subjective time to collapse actual time in a doctoral thesis. The book, later translated into English in 1910, suggests a nonliteral representation established by the memories, and a future formed by expectations creates a human being’s individual experience of time (Bergson, 1889/2002). John McTaggart Ellis (1908) suggests humans’ conceptualization of time exists as a personal interpretation of the mind. Reality itself cannot be temporal, and perception serves as an illusion for the idea of time (McTaggart, 1908). In the 1920s, psychologist Pierre Janet examines time perspective from the outlook of social behavior. Janet proposes individuals adapt to time and create time within the mind. After William James’ book, numerous other studies (c.f., Roediger, 2000) address the subject of time with human behavior (Cottle, 1976; Edwards, 2002; Metcalfe & Mischel, 1999).

Conversely, behaviorists did not comply with the importance of the psychological study of time and fought to negate the concept (e.g., B. F. Skinner, 1987; John Watson,

1913). Nevertheless, physics and philosophy's view of time as a social phenomenon furthered the time research on human behavior (i.e., Albert Einstein, 1931; Immanuel Kant, 1781). One example, Kant (1781), recognizes the conceptualization of time as an innate ability influencing an individual's view of the world. Other philosophers and psychologists expand Kant's viewpoint of thinking about time. Subsequently, Gestalt psychology emerges, proposing the mind forms a "global whole" by self-tendencies to create interpretations (Stolarski et al., 2015).

Alongside the earlier studies, psychologists studied the origin and development of mental functions, traits, or states to determine how the sensitivity of time forms in an individual's psyche. Wilhelm M. Wundt (1897), the father of experimental psychology, established the first experimental psychology lab. The significant contribution to psychology consists of structurally analyzing how the mind works (Alan, 2016; Wundt, 1897). The French social philosopher Jean-Marie Guyau (1890) proposes measuring time comprises the number and the variability of events, the organization, and the cognitive and emotional significance. Further, how time organizes itself in human beings' minds is a by-product of goal-directed behavior through the dynamics of needs and satisfying them while coping with the world. Guyau (1890) considers time a coping strategy and describes the process as an individual's "buildup of sensations producing an internal perspective aimed towards the future" and serves as a functional adaptation to one's environment (Guyau, 1890; 2006; Michon et al., 2008, p. 12). French experimental psychologist Paul Fraisse (1963) studies how humans adapt to time and create temporal conditions. Fraisse proposes individuals have no identifiable time sense and advocates not time itself but what occurs *in time*, produces time-related effects, experiences, or

perceptions (Fraisse, 1981; 2006). In the field of perception and estimation of time, the research spanned 30 years. Over that period, Fraisse evolved from being a behaviorist, not comfortable time as a variable, cognitive psychology, and receptive to the idea (Fraisse, 1984).

Joseph Nuttin and Willy Lens's book, *Future Time Perspective and Motivation* remains influential in contemporary time studies. Nuttin and Lens (1985) focus on the importance of future thinking as a human's primary motivational force (Nuttin & Lens, 1985). McGrath and Kelly's (1986) book *Time and Human Interaction: Toward a Social Psychology of Time* points out the lack of attention to temporal assumptions implicit in psychological observations, theories, and measurements. The book investigates reasons for the neglect, discusses assumptions about time prompting current research, and outlines areas of concern to psychology. The book remains essential to social psychology research and includes discussions of deeply embedded temporal constructs from Kahn (1990, 1992) and colleagues' works on stress in organizations. An individual manages mostly interpersonal activities while performing the tasks and interactional time, not necessarily company time handling task-involved activities. The concurrence of two different temporal frames of reference creates suitability problems for the individual regarding the organization (McGrath & Kelly, 1986).

In Julius Thomas Fraser's (1989) book, *Issues of Time and Mind*, he shares views originating from all disciplines as a form of interdisciplinary studies to inform on the subject of time. The book details his travel experiences revealing the intercultural differences in time conceptions (Levine, 1998). Fraser's educational background consists

of physics and significantly contributes to the study of time. Fraser served as a founding member of the International Society for the Study of Time (ISST, 2018).

### *Aspects of Psychological Time*

The conceptualization of time perception serves as a cognitive and motivational construct built on four premises. First, time perspective remains cognitive as it originates within an individual's thoughts and stands as a motivational concept as thoughts relative to time lead individuals to generate particular decisions and engage in specific behaviors. Secondly, time perspective encompasses three time-based periods; the past, present, and future. Each period uniquely influences the development of an individual's time perspective. Thirdly, time perspective varies among individuals due to learning and life experiences in numerous contexts, such as family, school, and community. Fourth, time perspective remains a multi-faceted concept inclusive of time relation, frequency, attitude, and orientation. Each dimension produces a different and significant portion of the construct (Mello & Worrell, 2015, Ortuno, 2019).

Time relation refers to understanding in the present moment the connection of the past thoughts and future expectations and how they contribute to the current situational moment calling it the holistic present (P. Zimbardo & Boyd, 2008). Time-frequency denotes the frequency individuals report thinking about the past, present, and future (Mello & Worrell, 2015). Kurt Lewin (1942a) asserts individuals increase their perspectives from days, weeks, months, and years as individuals age. Time meaning represents how individuals define past, present, and future experiences, such as cross-national variations in how individuals characterize time (Nunez & Sweetser, 2006).



This study focuses on psychological time research involving time perspective, time attitude, and time orientation. First, the time perspective comprises the past, present, and future (P. Zimbardo & Boyd, 1999). The second, time attitude, consists of the positive or negative attitude towards the three regions (Nuttin & Lens, 1985). Finally, time orientation is the “relative dominance of past, present, or future in a persons’ thought” (Hornik & Zakay, 1996, p. 385).

*Time Perspective.* Time perspective is the often-nonconscious process where the continual flows of personal and social experiences partitioning into temporal categories, or time frames (past, present, and future), help organize and provide meaning to those events (P. Zimbardo & Boyd, 1999). The mental process categorizes, records, and recovers personal and social experiences through the proportionate temporal focusing of past, present, and future, influencing various human behavior and cognition (Ortuno & Vasquez-Echeverria, 2013). Research conceptualizes time perspective as a cognitive and motivational construct varying among individuals (Mello & Worrell, 2015). The comprehensive process influences the encoding, storing, and recalling mental representation of situational context (P. Zimbardo & Boyd, 1999) and motivational intentions (Nuttin & Lens, 1985).

*Time Attitude.* An individual’s negative or positive attitude towards the past, present, and future explains time attitude. The positive or negative characteristics constitute “the affective attitude of an individual toward his past, present, and future” (Nuttin & Lens, 1985, p. 91). In time perspective literature, a balanced time perspective is the optimal time attitude and strongly correlates with an overall positive attitude (P. Zimbardo & Boyd, 2008). Working on a balanced time perspective likely improves an

individual's functioning, regardless of the intensity of their overall innate propensity to make positive appraisals regarding themselves, life, and the future (Sobol-Kwapinska & Jankowski, 2016). Other studies support the value of an optimal time attitude (e.g., Alessandri et al., 2012; Boniwell et al., 2010; Bryant et al., 2005; Mello & Worrell, 2015; Sobol-Kwapinska, 2009; P. Zimbardo & Boyd, 2008; P. Zimbardo et al., 2012).

*Time Orientation.* Time orientation is a psychological construct consisting of cognitive, affective, and behavioral components representing behavioral predispositions influencing thoughts, emotions, and motivations relative to the temporal focus (Bolotova & Hachaturova, 2013; Lasane & O'Donnell, 2005; Shipp & Aeon, 2019). Temporal focus is the amount of attention given to thinking of the past, present, and future, integrating the perceptions about previous experiences, present circumstances, and future desires “into their attitudes, cognitions, and behavior” (Shipp et al., 2009, p. 1). Time orientation predicts numerous facets of an individual’s social behavior and overall mental representation that habitually directs and guides an individual’s decisions to behave in a specific manner (Lasane & O'Donnell, 2005; Kostic & Chadee, 2017; Nuttin & Lens, 1985; Stolarski et al., 2015). Time orientation and time perspective together describe the evaluations and emphasis an individual attaches to the past, present, and future (Shmotkin, 1991, p. 243), although throughout the literature, the broader term of time perspective refers to any of the three psychological distinctions (Jones, 1993; Nuttin & Lens, 1985).

A great deal of the research on time orientation has shown how life experience predominantly “affects one’s ability to cognize, derive motivation, or be emotionally affected by a particular time frame” (Lasane & O’Donnell, 2015, p. 13). Thus, orientation

towards a particular time frame remains a powerful cognitive, affective, and behavioral compass by which human beings come to understand and relate to their psychological worlds (Lasane & O'Donnell, 2015; Temple et al., 2019). The past orientations quantify to what degree individuals experience negative or positive attitudes. The present dimensions measure the degree of focus on present-orientation for hedonic reasons or submission to a fatalistic perception that fate, not personal actions, primarily influences the future. Future orientation measures to what degree individuals place on future expectations with less emphasis on the past or present moments (P. Zimbardo & Boyd, 1999). The following describes each orientation and illustrates each category's significance beginning with an individual's negative focus on the past.

#### *Past-Negative*

Past-negative orientations tend to have a pessimistic, harmful, or aversive attitude toward the past associated with feelings of depression, anxiety, low self-esteem, self-reported unhappiness, and aggression (P. Zimbardo & Boyd, 1999; Boyd & P. Zimbardo 2005). Ortuno and Vasquez-Echeverria's (2013) study proposes time orientation relationship with a negative valence indicates "a greater role in the prediction of self-esteem" (p. 122). One study observes a correlation between high perceived stress levels in participants with high past-negative and high present-fatalistic orientations, suggesting time perspective may predict one's perceived stress (Papastamatelou et al., 2015). A cynical view of the past may drive the individual's susceptibility to elevate sensitivity to pain (Gacs et al., 2020). Negative orientation to past experiences positively associates with gambling, lying, and stealing (Aylmer, 2017), internet addiction, Facebook addiction (Przepiorka & Blachnio, 2016), severe personality problems, and more

reporting of suicidal ideation (Van Beek et al., 2011). The orientation also exhibits lower educational achievements (Fieulaine et al., 2006), emotional intelligence (Stolarski et al., 2011) and relates negatively to subjective well-being (Zhang & Howell, 2011; Zhang, Howell, & Stolarski, 2013). Individuals high in past-negative time perspectives focus on what could have been rather than what could be (P. Zimbardo & Sword, 2017). The following explains a positive focus on the past.

#### *Past-Positive*

Past-Positive individuals construct a view of the past as glowing, cheerful, and nostalgic (P. Zimbardo & Boyd, 1999). Those oriented to past-positive may collect photographs, keep souvenirs, maintain friendships from childhood, and happily anticipate traditional holiday celebrations (P. Zimbardo & Sword, 2017, p. 14). Studies indicate this orientation has positive correlations with emotional intelligence (Stolarski et al., 2011), extraversion (Kairys & Liniauskaite, 2015), and “account for a 13.7% variance in life satisfaction beyond personality traits” (Zhang & Howell, 2011, p. 171). Additionally, self-esteem (P. Zimbardo & Boyd, 1999) and conscientiousness (Van Beek et al., 2011) positively correlate with this dimension. Past-positive orientation positively correlates to subjective well-being (Garcia et al., 2016; Zhang, Howell, & Stolarski, 2013). Hence, a past-positive direction is the opposite of a past-negative and is associated with healthy functioning (Holman & P. Zimbardo 2009). These individuals exhibit high self-esteem and happiness and have a healthy outlook on life (P. Zimbardo & Boyd, 1999; P. Zimbardo & Boyd, 2008). The following section explains an individual’s fatalistic orientation towards the present.

### *Present-Fatalistic*

A present-fatalistic orientation individual considers the future as predestined and unmalleable by individual efforts. The orientation rarely concentrates on anything further than the present moment due to reliance on fate as the influential factor in changes, thus having an attitude of helplessness towards life (P. Zimbardo & Boyd, 1999). The present-fatalistic individual takes no action towards financial health (P. Zimbardo et al., 2017) and have a negative approach of resigning and accepting current misfortunes (Z. Zimbardo et al., 2017). This orientation tends to score high on depression, anxiety, frustration, aggression (Lefevre et al., 2019; P. Zimbardo & Boyd, 1999), addictions to the Internet and Facebook, and negatively correlates with happiness and subjective well-being (Stolarski et al., 2014; Zhang & Howell, 2011), life satisfaction (Zhang, Howell, & Stolarski, 2013), chronic stress (Bourdon et al., 2020), and intelligence (Zajenkowski et al., 2015). A correlation between high perceived stress levels in participants with high present-fatalistic and high past-negative suggests time perspective can predict perceived stress (Papastamatelou et al., 2015). Moreover, religious beliefs, living with tremendous hardships, or personal assessment of dire financial conditions may prompt the formation of a fatalistic orientation (P. Zimbardo & Sword, 2017). The following section explains an individual's hedonistic orientation towards the present.

### *Present-Hedonistic*

Present-hedonistic individuals orient toward enjoyment, pleasure, and excitement in the present moment with no careful thought of the outcome. The orientation shows a minimal preference for consistency, lacks impulse control, often searches for novelty by engaging in sensation-seeking activities (P. Zimbardo & Boyd, 1999), and lives deep in

the present moment (Z. Zimbardo et al., 2017). These individuals remain less willing to endure sacrifices in the present for rewards or anticipated benefits in the future. One's inability to anticipate subsequent events to come provokes maladaptive behavioral outcomes, such as delinquency, unsafe sex, substance abuse, and other unhealthy behaviors (Lens et al., 2012). Additionally, present-hedonistic individuals tend to be more anxious, shy, lie more, have low self-esteem (Aylmer, 2017), and display aggression and impulsivity (Stolarski et al., 2016).

Research supports an individual's time perspective as a significant individual variable for guiding decisions about risky actions. On average, individuals oriented towards hedonistic facets of the present found risk-taking more appealing than individuals that were not (Jochemczyk et al., 2017). Furthermore, exhibiting risky behaviors suggests remaining more likely to have addictive personalities and avoid pain (P. Zimbardo & Sword, 2017). Risky behaviors include: building risky investment portfolios (Sekscinska et al., 2018); failing to invest in health maintenance (Boyd & P. Zimbardo 2005); suffer higher rates of drug and alcohol abuse (Fieulaine, 2017; P. Zimbardo & Boyd, 1999); and exhibits risky driving behaviors (Lemarie et al., 2019; P. Zimbardo et al., 1997). Nevertheless, present-hedonistic time perspectives also correlate with trait intelligence (Stolarski et al., 2011), optimism, positive relationships with others, satisfaction with life, and positive moods (Stolarski et al., 2014). The following section explains an individual's orientation towards the future.

### *Future*

Individuals with a high future time perspective exhibit concern over the consequences of actions, behave rationally and are characterized by a high degree of

responsibility and ability to avoid diversions from goals (D'Alessio et al., 2003; P. Zimbardo & Boyd, 1999) and conscientiousness (Zhang & Howell, 2011). The future orientation positively correlates to subjective well-being (Zhang, Howell, & Stolarski, 2013) and negatively correlates with chronic stress (Bourdon et al., 2020). Individuals with this orientation avoid novelty, sensation seeking, aggression, risk-taking, impulsivity (P. Zimbardo & Boyd, 1999) tend to have higher cognitive abilities and efficient working memory (Zajenkowski et al., 2015). Future focus includes actively planning, setting goals, predicting the potential effect of possible courses of action to predict future goals most favorable, thereby avoiding failure (Bandura, 1991; Locke & Latham, 1990; P. Zimbardo & Sword, 2017). While taking protective measures in planning, individuals motivate and guide actions in anticipation of future events by planning for safe outcomes in the future that provide “direction, coherence, and meaning to one’s life.” Anticipated future events remain “current motivators and regulators of behavior” and cognitively represent the future (Bandura, 2001b, p. 7). Hence, a future perspective permits individuals to surpass the momentary environment, directing the present situation to match the anticipated outcome (Bandura, 2001a, 2001b).

In a meta-analysis and review of individuals’ future time perspectives, the findings suggest the temporal perspective may be beneficial in predicting behaviors in which motivational orientation and self-regulation play a significant role (Andre et al., 2018; Kooij et al., 2018, O’Neill, 2020). Self-efficacy, optimism, and hope remain the three influential future-oriented temporal perspectives noted in positive psychology research (Lopez et al., 2019). The idea of self-efficacy is an individual’s “beliefs in their capabilities to produce desired effects by their actions” (Bandura, 1997, p. vii).

Individuals self-regulate their personal actions while navigating ongoing environmental events before the individual engages in goal-directed action (Bonanno & Burton, 2013; Maddux, 2009), such as the eating behaviors of those with a future time perspective focus on their health (Dassen et al., 2015; Hall & Fong, 2003; Joireman et al., 2012). Optimists use an adaptive explanatory process to explain adverse events, either learned or dispositional (Carver & Scheier, 1993). With learned optimism, the optimist's goal-focused cognitions strive to distance oneself from negative situations (Seligman, 2006), while dispositional optimists seek to connect the event to positive outcomes in the future, generally expecting good things (Carver & Scheier, 1981). A meta-analytic review of dispositional optimism suggests optimists may adjust coping strategies to meet stressors' demands (Nes & Segerstrom, 2006). Carver and Scheier (2014) suggest greater dispositional optimism predicts better career success, social relations, better health, and greater engagement in pursuing goals.

Furthermore, optimism is a cognitive construct relating to motivation, whereby optimists execute effort while pessimists withdraw from taking action (Carver & Scheier, 2014). Hope is a positive motivational state emphasizing cognitions built on goal-directed thought. An individual with hope expects the perceived abilities to find alternate paths to accomplish personal goals (Snyder et al., 2002). The following section explains an individual's emphasis on balancing orientations during situational moments.

### *Balanced Time Perspective*

Research supports a balanced time perspective comprises low scores on the past-negative and present-fatalistic and moderately high in present-hedonistic and high scores on the past-positive, and moderately high future-time perspectives (Boniwell & P.



Zimbardo, 2004; Boyd & P. Zimbardo, 2005; Stolarski, 2016; P. Zimbardo & Boyd, 1999, 2008). The literature proposes a balanced time perspective can switch effectively among time perspectives relevant to task features, situational deliberations, and personal resources, rather than a bias towards a specific time perspective not adaptive across situations (P. Zimbardo & Boyd, 1999). Boniwell and P. Zimbardo (2004) propose that “a blend of temporal orientations would be adaptive, depending on external circumstances and optimal in terms of psychological and physiological health” (p. 171). The process of switching between time perspectives remains a cognitive ability central to optimum psychological functioning (Boniwell & P. Zimbardo 2004; Drake et al., 2008; P. Zimbardo & Boyd, 1999) and remains relatively unbiased. An optimal time perspective occurs when the individual adaptively shifts between the past, present, and future perspectives, depending on the current situation, needs, and values (Boyd & P. Zimbardo, 2005; P. Zimbardo & Boyd, 1999, 2008).

Research relative to a balanced time perspective developed within positive psychology (Boniwell et al., 2010; Boniwell & Osin, 2015; Boniwell & P. Zimbardo, 2003, 2004; Boyd & P. Zimbardo, 2005). A balanced time perspective as an essential adaptation mechanism emphasizes well-being and mediates the relationship between mindfulness and life satisfaction (Stolarski et al., 2016; Stolarski et al., 2020). Numerous studies demonstrate the crucial role of a balanced time perspective and a vital feature of subjective well-being and various aspects of socioemotional adaptation (Boniwell et al., 2010; Stolarski, 2016; Stolarski et al., 2015; Zhang et al., 2013). For example, Zhang et al. (2013) report a balanced time perspective relates to “increased satisfaction with life, happiness, positive affect, psychological need satisfaction, self-determination, vitality,

gratitude and decreased negative affect” (p. 169). In particular, a balanced time perspective correlates with positive mental health (Vowinckel et al., 2017), cognition, and self-regulation (Stolarski & Witowska, 2017; Witowska & Zajenkowski, 2019). Next, the following section explains the research approaches relative to an individual’s time perspective.

### *Time Perspective Research Approaches*

Time perspective research comprises two main approaches. The first integrates time perspective within motivational theories, focusing primarily on a future time perspective, such as coping by anticipating possible future events, thereby preparing for when the events occur (Gjesme, 1983). For example, some individuals may consider leaving a job if the perception of the work environment remains unfavorable. Yet, an individual with a future time perspective will evaluate the situation to determine if going or staying will help achieve the goals (Park & Jung, 2015). Contrarily, depending on how far into the future, the temporal perspective may avoid a threat or passively be waiting for the subsequent events by responding to the need to defend or protect themselves (Gjesme, 1983; Trommsdorff, 1983). Research posits individuals with a higher future time perspective tend to avoid risky investment behaviors (Sekscinska et al., 2018) to secure the expectations of financial outcomes in the future. The combination of future time perspective, financial knowledge, and risk tolerance remain significant in aggressive savings (Jacobs-Lawson & Hershey, 2005). The research proposes meaningful positive relationships with achievement, well-being, positive health behaviors, and moderating effects of different future time perspective measures (Kooij et al., 2018). For example, an experimental study of three groups; (a) time perspective intervention, (b) goal-setting

intervention, and (c) no treatment control group found the effects of the interventions enhanced the pursuit of healthy behaviors. The results indicated time perspective was causally associated with health behavior (Hall & Fong, 2003). Furthermore, utilizing adaptive self-regulatory study strategies, such as persistence during stress and having a positive attitude, remains positively associated with a future perspective (de Bilde et al., 2011).

The second approach emphasizes the cognitive method of encoding and storing information exercising influence motivation, judgment, decisions, and actions (Seijts, 1998; Zaleski, 1996; P. Zimbardo & Boyd, 1999). Depending on cognitive processes, emotional attitudes, and future expectations, an individual's perception may be positive or negative (Zaleski, 1996, p. 165). Individual differences in tendencies to use particular time perspectives connect to various cognitive abilities (Stolarski et al., 2011; Zajenkowski, Stolarski, Maciantowicz, et al., 2016). For example, research findings assert working memory development as a strong predictor of temporal orientation. Those with more effective working memory display a propensity towards future time perspective (Witowska & Zajenkowski, 2019; Zajenkowski et al., 2015; Zajenkowski, Stolarski, Maciantowicz, et al., 2016; Zajenkowski, Stolarski, Witowska, et al., 2016). Working memory's significance remains the ability to briefly store and manage information necessary to execute complex cognitive tasks, like the ability to reason, learn, and comprehend (Shiel, 2017). Furthermore, inhibition, memory, temporal discounting, and decision-making emerge as cognitive abilities deficits associated with attention-deficit/hyperactivity disorder (ADHD) (Coghill et al., 2018). ADHD has a relationship with the time perspective orientation of present hedonism, thus suggesting

time perspective therapy may be a possible diagnostic tool or therapeutic method in lessening ADHD symptoms (Carelli & Wiberg, 2012; Weissenberger et al., 2020; Weissenberger et al., 2019; Weissenberger et al., 2016).

Time perspectives correlate with meta-cognitive skills, knowledge, and experiences suggesting the temporal orientation influences meta-cognition (Zajenkowski et al., 2015). Metacognition functions as the acknowledgment and comprehension of one's thought process. Flavell (1979) defines metacognition as the "knowledge and cognition about the cognitive phenomenon" (Flavell, 1979, p. 1). The level of thinking includes individuals' ability to think, understand, adapt, change, control, and use thought processes (Flavell, 1979; Flavell, 1987). An individual who is aware and thinks about the temporal framing can learn to switch adaptively between particular time perspectives. The psychological assessments regard the current environment, the impact of past work experiences, the direction of forthcoming intentional behavior, and how the factors affect the sense of well-being at work (Lazarus, 1982; Lazarus & Folkman, 1984; Nimon & Zigarmi, 2015; Shuck et al., 2018; Zigarmi et al., 2011).

The literature illustrates the value of reframing time perspectives in the course of interventions, coaching, and therapy (Boniwell & Osin, 2015; Bowles, 2018; Kazakina & van Beek, 2017; Peetsma et al., 2017; Stolarski & Witowska, 2017; Sword et al., 2015). For example, clinicians use time perspective therapy for post-traumatic syndrome disorder by shifting the focus of past trauma to a more positive direction of looking towards the future (Stolarski & Cyniak-Cieciura, 2016; Sword et al., 2014; P. Zimbardo et al., 2012). Moreover, time perspective therapy helps individuals with various day-to-day issues, such as improving relationships, solving problems, depression, stress, and

anxiety (Sword & P. Zimbardo 2016). Next, the following section explains the significance of cognitive, emotional, and behavioral coping strategies.

#### *Time Perspective – Cognitive, Emotional, Behavioral Coping Strategies*

A fundamental principle of temporal research asserts that individuals differ in past, present, and future (Bluedorn, 2002; Nuttin, 1985; Rappaport, 1990; Shipp & Aeon; 2019; P. Zimbardo & Boyd, 1999). Temporal focus comprises the level of attentiveness individuals dedicate to thinking about the past, present, and future (Shipp & Aeon, 2019; P. Zimbardo & Boyd, 1999). For instance, our affective (emotional) experiences more heavily guide the present. In contrast, cognitive experiences more greatly influence the future (Jones, 1988). In addition, an individual must have the aptitude to formulate conditional probabilities connecting present behaviors to future outcomes (De Volder & Lens, 1982; Jones, 1988; Nuttin, 1985). The concept remains crucial relative to how an individual integrates perceptions about past experiences, current situations, and future expectations into personal cognitions, attitudes (emotions), and behavior (Bolotova & Hachaturova, 2013; Jones, 1993; Shipp et al., 2009; Stolarski & Zajenkowski, 2014).

Bolotova and Hachaturova's (2013) research considers the interrelationship between cognitive, emotional, and behavioral coping strategies and time perspectives. The significance of adaptive coping choices can protect individuals' physical and mental health, while maladaptive coping options are detrimental (Holton et al., 2016). Adaptive coping strategies positively influence perceived stress management more than maladaptive coping strategies (Joo et al., 2017). The tensions associated with adaptive or maladaptive choices of strategies to cope, in any given moment, have different effects on the individual and organizational outcomes (Rabenu & Yaniv, 2017; Sonnentag, 2012).

To respond adaptively to stressors, the capability to regulate emotions is critical (Bonanno & Burton, 2013; Carver & Scheier, 2016; Denny et al., 2015).

As summarized in Tables 1 and 2, the study findings correlate with an individual's time perspective, coping strategies, and choice of coping methods' cognitive, emotional, and behavioral variants. In addition, the findings show the percentage equivalence of the choice of adaptive, relatively adaptive, and nonadaptive coping approaches concerning an individual's time perspective and illustrate the variations of coping methods proportionate to cognitive, emotional, and behavioral coping strategies relative to time orientations (Bolotova & Hachaturova, 2013).

Table 1

*Choice of Coping Strategies Relative to Time Perspective Orientation*

Time Orientation	Adaptive	Relatively adaptive	Non-adaptive
Past-Negative	15%	37%	48%
Past-Positive	50%	29%	21%
Present-Fatalistic	22%	43%	35%
Present-Hedonistic	37%	35%	28%
Future	63%	25%	12%

*Note:* Adapted from Bolotova & Hachaturova, 2013, p. 126.

Table 2

*Choice of Cognitive, Emotional, or Behavioral Coping Strategy*

Time Orientation	Cognitive	Emotional	Behavioral
Past-Negative	17%	50%	33%
Past-Positive	22%	36%	42%
Present-Fatalistic	25%	59%	16%
Present-Hedonistic	32%	25%	43%
Future	53%	15%	32%

*Note:* Adapted from Bolotova & Hachaturova, 2013, p. 126.

The results indicate that a future time perspective leads to cognitive and behavioral coping strategies in a stressful situation. These individuals are highly self-regulated, analyze issues, and find approaches to solve problems (Bolotova & Hachaturova, 2013; Bonanno & Burton, 2013). The negative orientation to the past connects to high levels of nonadaptive emotional coping strategies, such as suppressing emotions and retreat (Bolotova & Hachaturova, 2013). Thinking driven by emotions has a propensity to affect good judgment (Lerner et al., 2015). The fatalistic time perspective predicts a nonadaptive behavioral approach in resolving stressful events. A positive emphasis toward the past comprises adaptive behavioral and emotional coping strategies. The hedonistic orientation correlates with dynamic coping behavior in stressful situations and adaptive and nonadaptive coping methods. The negative past focus leads to choosing the least adaptive coping strategies and direction to the present-fatalistic, which results in the relative absence of different coping strategies.

Thus, an individual's time perspective can predict managing a challenging situation, whether positive or negative, in the coping techniques (Bolotova & Hachaturova, 2013). Significant to employee engagement, cognitively engaging makes up 50% of the variance of an individual's psychological well-being (Joo et al., 2017). Future orientation and past-positive orientations are comparatively very high in cognitive effort relative to the other time orientations. This study illustrates the choice of utilizing mental, emotional, or behavioral coping strategies depending on an individual's time perspective (Bolotova & Hachaturova, 2013). The result may offer insight into the process of how an individual engages or withdraws in the work environment. Next are the theoretical assumptions guiding and shaping the study "by specifying how and why

the variables and relational statements are interrelated” (Labovitz & Hagedorn, 1971, p. 17). The following section describes the four foundational human capital theories, field, time perspective, and employee engagement.

### Foundational Theories

The foundational theories supporting the research study provide the underlying structure, orientation, and viewpoint (Merriam & Simpson, 1995) of the interrelated elements, constructs, variables, proposed relationships, and posited outcomes (Roberts, 2010; Robson, 2011). The four theories, including human capital, field, time perspective, and employee engagement, shape this study's framework to build and support the research objectives. The following explains the human capital theory.

#### *Human Capital Theory*

In 1682, the economist Sir William Petty served as the first to value labor as a significant factor in estimating a country's wealth (Kiker, 1966; Petty, 1769). However, the foundation of human capital as a discipline and theory originates from Scottish economist Adam Smith's book. Smith (1776) wrote *An Inquiry into the Nature and Causes of the Wealth of Nations* that defines four types of fixed capital: land, buildings, machinery, and human abilities. Smith (1776) suggests a nation's capital stock includes an individual's acquired skills and capabilities that increase wealth for society and the individual (Smith, 1776). Other economists recognize the concept of considering human beings or their skills as capital in developing their body of work (e.g., Fisher, 1897; Mill, 1909; Say, 1821; Senior, 1939).

In 1890, the British economist Alfred Marshall wrote *The Principles of Economics* and proposed the most valuable capital remains within investments in human



beings (Marshall, 2013). Marshall explains human behavior's economic aspects as a beginning point when developing laws governing the establishment of economic systems. Marshall views the economy as part of a whole, not isolated from political and social factors or cultural institutions (Marshall, 1885). However, the discipline and theory of human capital took shape in the 1950s.

The main factors of production in the 1950s were physical capital, labor, land, and management (Becker, 1993; Mincer, 1962). During that time, Economist Robert Solow's (1957) work revealed a gap of economic growth in the United States unexplainable through the main factors of production, which stands due to the increase in human capital. Solow's (1957) work led to the development of economic growth accounting and became the catalyst for subsequent attention to human capital and shaping human capital theory.

American economist Theodore Schultz (1961) uses the term human capital in his article "Investment in Human Capital" and asserts skills and knowledge as a form of wealth do not appear apparent but remain a sizeable part of the deliberate investment (p. 1). Schultz considers the unexplained residual gap the most distinctive feature of the United States economic system and proposes investing in human capital remains responsible for workers' earnings increase (Schultz, 1961). Subsequently, Shultz (1981) includes innate and acquired abilities, informal education, and human well-being.

As Theodore Schultz began the early stages of human capital research, Gary Becker and Jacob Mincer, founding fathers of modern labor economics (Teixeira, 2007), aid in developing the empirical foundations of human capital theory. Schultz, Becker, and Mincer propose investments in education and training build human capital and

capabilities as capital, promoting economic advancement. The study's framework provides knowledgeable explanations of investment in education and training and the profitability stemming from the human capital investments (Becker, 1964; Mincer, 1974; Schultz, 1961). The research of Gary Becker (1993) and Slaus and Jacobs (2011) submit investments in employment and education serve as the primary methods for developing human capital (Becker, 1993; Mincer, 1962; Slaus & Jacobs, 2011). Mincer asserts on-the-job training and apprenticeships as a form of investment in human capital through employment and work experience (Mincer, 1962; Mincer, 1974). Becker (1993) later includes health investments as an additional method for developing human capital (Becker, 1993, p. 16).

Luthans et al. (2004) expand human capital to include positive psychological capital, which considers "who you are." Four positive psychological variables make up confidence, hope, optimism, and resilience (Lopez et al., 2019; Luthans, 2017; Luthans et al., 2004; Luthans & Youssef, 2004). The variables can develop as personal resources (Lopez et al., 2019; Luthans & Youssef, 2004). Engagement literature notes links to engagement and positive psychological capital (Bakker, 2017; Gupta & Shaheen, 2018; Nigah et al., 2012; Soni & Rastogi, 2019; Xu et al., 2017; Xu et al., 2019; Zhong et al., 2016). Positive psychological capital research stresses the importance of flexibility, innovation, and developing and managing human capital in the 21<sup>st</sup> Century work environment (Lopez et al., 2019).

Under the umbrella of human capital, more current research sub-divides human capital to distinguish between human capital, human capital resources, and strategic human capital at the individual and unit level. Human capital consists of the "individual's

knowledge, skills, abilities, and other characteristics (KSAOs)” necessary for successful economic results. Human capital resources comprise individual or unit-level capacities based on individuals' KSAOs available relative to unit-level purposes. Strategic human capital resources further extend the idea by referencing the accessibility of resources for unit-level competitive advantage (Ployhart & Moliterno, 2011; Ployhart et al., 2014). Other current research considers the psychology of the individual. For example, Kell et al. (2018) discuss a “psychological process-based account of human capital grounded in cognitive-affective processing system” (CAPS) (p. 1). This human capital perspective prioritizes internal resources in explaining individual outcomes rather than the environments.

In summary, the necessary foundation of the human capital theory embodies the role of human beings and the “amount of knowledge, skills, motivations, abilities, and health formed as a result of investments and accumulated” by an individual, “which contributes to the growth of the labor productivity and income of the” individual (Chulanova et al., 2019, p. 1; Huff, 2018). Human capital represents a country’s fundamental economic growth source (Barrio et al., 2004; Bucci et al., 2019; Schultz, 1981; Solow, 1957). An individual’s investments are vital in sustaining a competitive advantage and increasing effectiveness from an organizational perspective. An individual’s energy transfers into performance, generating profits (Albrecht et al., 2015; Albrecht et al., 2018; Lee et al., 2017). From the individual level, investments in education and training increase skills, generate higher salaries, increase well-being, and have the potential to further opportunities for career advancement (Becker, 1993). Human beings manage economies and organizations, and the labor, innate or attained, serves as

the current basis of human capital theory (Becker, 1993; Bucci et al., 2019; Kell et al., 2018; Lenderman, 2018; Schultz, 1981). The following section discusses field theory.

### *Field Theory*

Kurt Lewin (1942a), one of the most distinguished Gestalt psychologists, developed field theory within psychology. Lewin describes field theory as “a method of analyzing causal relations and building scientific constructs” (Lewin, 1943, p. 201) to analyze behavior serving as a method to changing behavior by permitting an individual to understand actions more fully (Burnes & Cooke, 2013). The scientific approach to psychology draws from physics and mathematics to construct a psychological field theory serving social science (Lewin, 1942a, 1943). Lewin’s psychological theory examines patterns of interaction between an individual and the environment, emphasizing the dynamic forces and interrelations of perception, experience, and behavior (Hergenhahn & Henly, 2014).

The significance of the psychological concept is that an individual's behavior does not depend entirely on the present situation. An individual’s mood is profoundly affected by hopes and wishes, and memories. As science dictates, data represent results inclusive of a single setting within a specific situation, called the field. The field considers the totality of coexisting facts as mutually interdependent relative to perceptions (Einstein, 1933; Lewin, 1943) and encompasses all the factors determining an individual's behavior in a particular moment (Lewin, 1943). The present state contains all the facts “of that individual as a product of his history, somewhat physical and social-surroundings” (Lewin, 1942a, p. 213).

The field remains the life-space comprising an individual's psychological environment. The psychological content is the primary source of an individual's experiences and needs and segregates experiences as accumulated (Lewin, 1946). An individual's life space contains all perceived interpretations of the internal and external environment, remaining conscious of a specific moment. Lewin (1943) advocates studying the life-space as necessary for understanding behavior and asserts psychology must view the individual and the environment as one field. Behavior depends on the present psychological field, not the psychological past and future. However, the life-space consists of the psychological, past, present, and future as one facet at any given time (Lewin, 1940). The current field's psychological reality level corresponds with the individual's beliefs at that moment (Lewin, 1943; Marrow, 1969).

Central to Lewin's field theory, the construct of a tension system renders within an individual and the outside pressures stemming from the surrounding field. Lewin describes the subject as dispositional tensions required for action created by needs towards attaining a goal (Marrow, 1969a). The theory asserts an individual's inherent needs existing at a given time stay significant. All individuals have intrinsic conditions causing tension. An intrinsic attractiveness of an event, object, or situation meeting the need reduces stress, while barriers between a need and the plan increase tension. The objective determines the strength of forces and valances (Lewin, 1940), referred to as driving or restraining forces (Lewin, 1946). The resulting behavior responds to the psychological mixture of influences.

Lewin proposes releasing the tension satisfies a need and sets the pressure to form an intention (Lewin, 1940), which sets up quasi-needs producing actions satisfying the

original need (goal). For example, to provide information to someone and the telephone service is not operational, the individual sends an email or other communication form to reach the primary goal. The intention changes to match the environment, and a new action emerges from the psychological system supporting the original intent (Lewin, 1935). Rather than a rigid status, a more fluid state towards meeting the goal provides a quicker tension decrease (Lewin, 1940). A need not satisfied corresponds to a relatively constant state of anticipation of individual inner-personal systems. Pressure from the environment may keep, or partially keep, the individual in a particular form of tension (Lewin & Cartwright, 1951).

Lewin (1940) states that “conceptually, tension refers to the state of one system relative to the state of surrounding systems” (p. 176). The connection between psychological needs and tension systems relates to the intensity of the tension to the need's intensity. For example, incredibly ambitious individuals will show quasi-needs of greater power than the average individual. Furthermore, field theory states, “intentions are made, as a result of a given time perspective, to secure a certain behavior in the future expecting to bring nearer the fulfillment of one or several needs” (Lewin, 1946, p. 368).

An individual's behavior remains different due to how tensions between perceptions of self and the environment work themselves out. No two individuals operate the same way (Bailey et al., 2019; Bianchi, 2018; Kahn, 1990; Lee et al., 2020; Marrow, 1969a; Marrow, 1969b, Medrano & Trogolo, 2018, Nimon & Zigarmi, 2015; Shuck, 2019, Turner, 2020). According to an individual's time perspective, the most differentiating factor is the value or significance given to “the various constituents of the surrounding world” (Frank, 1939, p. 297; Lewin, 1935, 1936).

Lewin (1942a) describes time perspective as “the totality of the individual’s views of his psychological future and psychological past existing at any given time” (p. 222). Lewin and Cartwright (1951) propose time perspective serves as a “key concept characterizing subjective time” (p. 75). Lewin (1946) describes the forming and structuralizing of the space per life experiences:

The main differences between developmental stages are: (1) an increase in the scope of the life-space regarding: (a) what is part of the psychological present; (b) the time perspective in the direction of the psychological past and the psychological future; (c) the reality-irreality dimension; (2) an increasing differentiation of every level of the life-space into a multitude of social relations and areas of activities; (3) increasing organization; (4) a change in the general fluidity or rigidity of the life-space. (p. 341)

The following section discusses the time perspective theory.

### *Time Perspective Theory*

Time perspective theory finds its foundation in Kurt Lewin’s (Lewin, 1942b, 1943) research on time and future thinking. The approach focuses on an individual and the level of focus on the past, present, and future, assuming an individual’s time perspective includes a variable influencing an individual’s behavior. Thus, the theory proposes an individual’s intention to behave in a particular manner influences how individuals connect and organize psychological interpretations of the past, present, and future to immediate experiences (P. Zimbardo & Boyd, 1999).

An individual’s time perspective creates the central element of the psychological experience. Time perspective emerges from the cognitive processes of segregating and

organizing the human experience into the past, present, and future. The theory suggests an individual's time perspective contains a temporal aspect forming the cognitive framing of experiences. P. Zimbardo and Boyd (1999) identify the cognitive structuring into five orientations: past-positive, past-negative, present fatalism, present hedonistic, and future to measure an individual's time perspective. The mental frames encode, store, and recall experienced events and form expectations, goals, contingencies, and imaginative scenarios. The five directions reflect cyclical, repetitive temporal patterns or unique, non-recurring linear events in an individual's life (Hall, 1984). The translating and storing of those experiences' meanings inform cognitive processes influencing motivation, judgment, decisions, and actions (Seijts, 1998; Zaleski, 1996; P. Zimbardo & Boyd, 1999). The content contains an individual's time perspective, thus influencing present behavior.

### *Employee Engagement Theory*

Engagement theory presumes employee engagement emerges through an individual's interaction and perception of the work environment (Imperatori, 2017; Joo et al., 2017; Kahn, 1990; Kahn, 1992). Employee engagement develops through cognitive analysis, emotional expression, and, eventually, affective perception fosters the intention to behave in a particular direction towards their work role (Shuck, Osam, et al., 2017). The basis for employee engagement theory is the unique and varying psychological experience and interpretation of an individual's work environment. The internalized psychological state forms uniquely among individuals, and no two individuals operate in the same manner. (Bailey et al., 2019; Bianchi, 2018; Kahn, 1990, 1992; Lee et al., 2020;



Marrow, 1969a; Marrow, 1969b, Medrano & Trogolo, 2018, Nimon & Zigarmi, 2015; Shuck, 2019; Shuck, Osam, et al., 2017; Shuck & Wollard, 2010).

### Summary

Chapter II summarizes and analyzes the relevant literature and theories supporting the topic of this study. The chapter illustrates the gap in the engagement literature, permitting the need for the research. In this study, the researcher explores an individual's time perspective to understand the individual-level characteristics underpinning how employee engagement develops and puts the knowledge into practice.

Chapter III explains the methodology, variables, data collection, population used in this study. Finally, chapter IV will present the findings. Chapter V will conclude with a dialogue of the results, a discussion, limitations of the study, recommendations for future research, and concluding remarks.

## CHAPTER III – METHODOLOGY

The purpose of this study is to determine the relationship between employee engagement and an individual's time perspective. The basis of employee engagement involves the individual's personal psychological experience and the distinctive interpretation of the work setting (Khan, 1990,1992; Shuck, 2019; Shuck & Reio, 2011; Shuck & Wollard, 2010). The study examines time perspective as the temporal influence in how employees develop their psychological state of engaging or withdrawing personal resources (Kahn, 1992). Exploring the psychological processes forming an individual's experiences offers organizations knowledge to pursue a holistic approach in developing employee engagement, thus complementing the current engagement research strategies external to the individual (Imperatori, 2017; Kaiser & Schulze, 2018; Morgan, 2017; Turner, 2020).

A review of the current literature supports a potential relationship between the variables. The first part of this chapter explains the study's research design, research objectives, variables, population, and sample. Next, the study describes the instrumentation, internal and external validity, data collection procedures, and proposed analysis. The chapter concludes with a summary.

### Research Design

This study applies a quantitative research methodology to examine the relationship between two variables using a survey. Quantitative research describes, explains, and makes predictions to generalize findings that apply to other populations. The data displayed numbers, statistics, and statistical relationships (Creswell & Creswell, 2018; Stake, 2010).

This quantitative research employed a nonexperimental, cross-sectional, correlational research design. According to Creswell and Creswell (2018), a non-experimental study's purpose includes observing, describing classifying, or analyzing "naturally occurring relationships between variables of interest" (p. 91) and does not make a distinction between independent and dependent variables. The naturally occurring variables of interest in this study include employee engagement and time perspective.

The cross-sectional correlational research observes what naturally happens without manipulating the variables (Price et al., 2015) at a single point in time (Shadish et al., 2002). Correlational research aims to discover variables that show systematic relationships, which involves observing two variables to establish a statistically corresponding relationship indicating if a change in one variable creates a change in the other (Stangor, 2015). Research objectives two through six intended to determine whether a systematic relationship existed between each time perspective subscale variable and employee engagement. The research observed one point in time without manipulating the variables using Pearson's correlation coefficient as the statistical test. Research objective seven aims to determine how much variation in employee engagement was explainable by each predictor variable of time perspective through the statistical test of multiple regression analysis. Therefore, a non-experimental, cross-sectional, correlational research design served as an appropriate design for meeting the purpose of this research. The following research objectives determine if a relationship exists between employee engagement and time perspective.

## Research Objectives

The seven objectives guide this research.

*RO1:* Describe the demographic characteristics of participants by age, job tenure, gender, and industry.

*RO2:* Determine the relationship between past-negative time perspective and employee engagement.

*RO3:* Determine the relationship between past-positive time perspective and employee engagement.

*RO4:* Determine the relationship between present-fatalistic time perspective and employee engagement.

*RO5:* Determine the relationship between present-hedonistic time perspective and employee engagement.

*RO6:* Determine the relationship between future time perspective and employee engagement.

*RO7:* Determine the relationships between the orientations of time perspective and employee engagement.

The following section describes the variables associated with the research objectives.

## Variables

Stangor (2015) identifies variables as “an attribute that can assume different values among different people or across various times or places” (p. 18). A review of the related literature supported examining a relationship between the variables of employee engagement and the role time perspective as the process of being engaged that comprised

a temporal dimension (Kahn, 1990, 1992). Time perspective remains a cognitive process comprised of temporal framing of the past, present, and future psychological experiences and are interrelated. The content of those experiences determined an individual's time perspective that influenced present behavior. Time perspective contains five subscale variables; (a) past-positive, (b) past-negative, (c) present-fatalistic, (d) present hedonistic and (e) future (P. Zimbardo & Boyd, 1999). Employee engagement subscale variables comprise (a) cognitive, (b) emotional, and (c) behavioral engagement (Shuck, Adelson, & Reio, 2017). This study examines whether a relationship exists between each of the five subscales variables and the EES full scale for the variable of employee engagement. Additionally, the study examined the ZTPI-15 subscales as five independent variables with the scale of the EES as the dependent variable.

Furthermore, this study contains the demographic criteria serving as characteristics necessary to participate in the survey. The requirements to participate in the survey include; (a) must be an employee in the United States, (b) employment status of 35 hours or more, (c) 18 years of age or older, and (d) job tenure of one year or more. In addition, data collection for reporting purposes included (e) gender and (f) industry of employment. Next, the following section explains the demographic variables and variables for reporting purposes.

#### *United States Employees*

The study examined participants working in the United States. The engagement literature suggests cultural differences affect how individuals perceive the effects of the work environment and well-being (e.g., Medrano & Trogolo, 2018). Sun and Bunchapattanasakda (2019) claim engagement research lacks cross-cultural differences.

Rothmann (2013) considers cultural and psychological roots necessary when examining engagement. However, cultural factors may influence engagement, but commonalities exist (Kelliher et al., 2013; Turner, 2020). Pisanti et al. (2011) suggest individuals perceive job characteristics, organizational conditions, and well-being differently, and evidence exists of cross-national differential effects of working conditions on well-being. In addition, time perspective research indicates cross-cultural differences (Sircova et al., 2015). Therefore, individuals working in the United States served as a criterion necessary to participate in the survey.

### *Age*

Research studies support age as a significant variable relative to an individual's time perspective. Laureiro-Martinez et al. (2017) claim studies might neglect the "systematic relationship" between age and life-span stages by limiting age ranges (p. 101). Lee et al. (2018) further assert the relationship of age and time perspective and notes individuals learn to regulate their responses to the environment as individuals age emotionally. Katana et al. (2020) and Lang and Carstensen (2002) note differences relative to age in viewing the future as open-ended or limited. Other research indicates that time perspective predicts longevity and mortality and many other aspects that have implications for clinical intervention and health promotion throughout adulthood (Gabrian et al., 2017; Fry & Debats, 2011; Fung & Issacowitz, 2016).

The Bureau of Labor Statistics (BLS; 2021) gathers and reports workforce data for the United States. The labor force data consisted of ages 16 years old and over. For this study, the age range includes 18 to 19, 20 to 24, 25 to 54, and 55 or over. This research utilizes age ranges from 18 years or more to ensure compliance with

Institutional Review Board (IRB) informed consent minimum age requirements of adult participants (See Appendix A).

### *Employment Status*

Engagement research considers employment status (Chumney et al., 2018), while other studies specifically identify differences (e.g., Hickman & Robinson, 2020). The BLS (2021) reporting criteria defines full-time work hours as 35 hours per week. This study utilizes the same employment status as the criteria necessary to participate in the survey.

### *Job Tenure*

The variable of job tenure includes the length of time an individual worked in the same job. Engagement research suggests job tenure affects engagement scores. For example, Gallup (2018) reported that new employees had the highest engagement levels, on average, because of the novelty of the new work role. Trahan (2009) claims engagement declines 9% within a year of the employee's hiring date. The job tenure criteria for this study are defined as one year or more to provide the necessary time to gain experience in the current work environment.

### *Gender*

Gender, male or female, remains a demographic within engagement (e.g., Fletcher, 2017; Sia et al., 2015; Sonnentag et al., 2021; Schneider & Meyer, 2021) and time perspective (e.g., Bodecka et al., 2021; Ely & Mercurio, 2011; Mello & Worrell, 2006) studies. This study followed previous studies, extending the knowledge of gender differences of males and females by maintaining a similar scope. Schneider and Myer

(2021) suggest that future research direction could expand within the conceptualization for future research.

### *Industry*

The study's survey requested participants to identify work industry information. Engagement research suggests future use of the EES connected to different industries emphasized applicability in other contexts (Shuck, Adelson, & Reio, 2017) and increased generalizability (Shadish et al., 2002). Next, the following section explains the population and sample.

### Population and Sample

A study's population refers to a pre-determined population of interest to the research. Within the broader group, the researcher collects data from a smaller selection within the group. The research sample describes a portion of the population that participates, inferring to the broader population (Denscombe, 2014). This study uses survey research that provides "a numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell & Crewsell, 2018, p. 30-31). The study's sampling method employed a non-random, convenience, and purposive sampling strategy. Non-random (also known as non-probability) was a sampling technique that not all population members had an equal chance of participating in the study. Convenience and purposive sampling were both non-random sampling techniques (Saunders et al., 2012).

### *Convenience Sampling*

Convenience sampling meets the target population's specific criteria, such as easy accessibility, geographical location, availability, or willingness to participate in the study



(Field, 2020). This study utilizes an online data collection service, Amazon Mechanical Turk (MTurk), and obtains the sample. MTurk offers an economical means to gather human research subjects due to its large, diverse participant population, ease of access, quick data collection, and reasonable cost (Aguinas et al., 2021). This study uses convenience sampling of MTurk participants. Convenience sampling indicates participants as easily accessible, available at any given time, and participate willingly in the survey (Aguinas, 2021; Gerlich et al., 2018).

### *Purposive Sampling*

According to Etikan et al. (2016), the purposive sampling technique involves selecting participants for the sole purpose of a participant's qualities. The participant's eligibility criteria for participating in this study include working in the United States, ages 18 years or older, and job status of 35 or more hours per week. Participants must be in their current position for one year or more. The collection of additional demographic data for reporting purposes consists of identifying the participant's gender and the industry of current employment.

### *Sample Size Analysis*

According to Dillman et al. (2014), considerations when determining sample size are; (a) size of the population, (b) homogeneity, (c) margin of error, and (d) confidence level. The larger the population, the larger the sample. If the population sample was homogeneous, minor variance appears in response choices that indicate fewer people are needed, while the opposite requires an increase in the target audience (Phillips et al., 2013). A diverse selection requires an even larger sample. A fair margin of error needs fewer people; however, little to no error requires more. The confidence level “tells you

how certain you can be that the results from your sample represent the population within the set margin of error” (p. 67). The higher the confidence level, the more the sample needs to increase (Phillips et al., 2013). In this study, the results represent the population within the stated margin of error.

Power analysis estimates a target sample size. The primary purpose of statistical power analysis is to determine the smallest sample size suitable to detect the effect of a given test at the desired level of significance (Creswell & Creswell, 2018). G\*Power is a free power analysis tool, which provides statistical tests commonly used in social and behavioral research (Faul et al., 2007). This study uses G\*Power version 3.1.9.7 and calculates the sample size (Faul et al., 2009) for two variables using Pearson Correlation Coefficient relative to the research objectives two through six. Also, the sample size calculation consists of five independent variables and one dependent variable for research objective seven’s multiple regression analysis. A priori test identifies the estimated sample size required for each inferential test (Creswell & Creswell, 2018). Next, the following explained the priori tests for G\*Power calculation for Pearson Correlation Coefficient and multiple regression analysis.

*Pearson’s Correlation Coefficient.* According to Cohen (1998), to perform a statistical power analysis, there were factors to consider; (a) significance level or criterion, (b) effect size, (c) desired power, (d) estimated variance, and (d) sample size.

The significance criterion was called the alpha and noted as a symbol in statistics as  $\alpha$ , represented “the risk of mistakenly rejecting the null hypothesis” (Cohen, 1992, p. 156). The alpha was noted as two-sided or one-sided, where parameters were either positive or negative. Pearson’s correlation coefficient would have a two-tailed alpha

value (Creswell & Creswell, 2018). Cohen (1992) recommended when utilizing a two-sided test,  $\alpha$  = small .01, medium .05, large .10; however, .05 is the most common (p. 156). This study utilized a two-sided parameter with the recommended medium .05 significance criteria (Cohen, 1992).

According to Field (2013), the effect size was “a standardized measure of the magnitude of an observed effect” (p. 874). Thus, the effect size identified the strength of conclusions about the relationship among the variables (Creswell & Creswell, 2018). Research objectives that ask if a relationship exists between two variables, such as in this study, describe “the magnitude and direction of association between two variables measured on an interval scale” (Creswell & Creswell, p. 159). Cohen (1992) suggests the operational definition of effect for Pearson’s correlation coefficient was small (.10), medium (.30), and large (.50) effects (p. 157). This study used a medium effect of .30. The desired power was “the ability of a test to detect an effect of a particular size” (Field, 2013, p. 881).

According to Cohen (1992), power is  $1 - \beta$ . .80 was a convention proposed for general use. A smaller power value than .80 would incur too significant a risk of Type II error, while a large number could exceed the researcher’s resources (p. 156). The researcher needed to know the number of participants required per the desired power for the specified alpha ( $\alpha$ ) and hypothesized effect size. “The estimated variance is a range of values that describe a level of uncertainty around an estimated observed score” (Creswell & Creswell, 2018, p. 180). This study used a 95% confidence level, which meant 95 out of 100 times, the score falls into the established range (Creswell & Creswell, 2018).

*Multiple Regression.* The G\*Power analyses for multiple regression utilizes a medium effect size ( $f^2 = .015$ ), an alpha of .05, and a power of .80 (Cohen, 1988). The effect size for multiple regression indicates;  $f^2 \geq 0.02$  shows a small effect;  $f^2 \geq .15$  specifies a medium effect; and  $f^2 \geq .35$  signifies a large effect (Cohen, 1992, p. 157).

*Total Sample Size.* The sample size for Pearson Correlation was 84, and for a multiple linear regression model with five predictor variables was 92. Sprouse (2011) recommended collecting an additional 15% increase in the sample size to compensate for MTurk participants' attrition and failure to pass inattention checks (Barends & de Vries, 2019; Zhou & Fishbach, 2016). The total number of participants required increased to 106. The following section explains the validity of the study.

### Validity

According to Shadish et al.'s (2002) definition, validity was the approximate truth of an interpretation and the degree to which relevant evidence supports the inference, as true or correct. Validity comprises a "property of inferences, not a property of design or methods" (p. 34), as different circumstances contribute more or less to the assumptions or conclusions. Cook and Campbell (1979) categorizes validity as; (a) statistical conclusion validity, (b) internal validity, (c) external validity, (d) and construct validity.

#### *Statistical conclusion validity*

Shadish et al. (2002) define statistical conclusion validity as "the validity of inferences about covariation between two variables" (p. 512). This form of validity concerns the qualities of the study that made statistical conclusion types of errors more likely. Ensuring statistical conclusion validity involves guaranteeing the use of adequate

sampling procedures, appropriate statistical tests, and reliable measurement procedures (Shadish et al., 2002).

Shadish et al. (2002) describe the nine threats to statistical conclusion validity and the “reasons why inferences about covariation between two variables may be incorrect” (p. 45). The nine threats are; (a) low statistical power, (b) violation of assumptions of statistical tests, (c) fishing and error rate problem, (d) unreliability of measures, (e) restriction of range, (f) unreliability of treatment implementation, (g) extraneous variance in the experimental setting, (h) heterogeneity of units, and (i) inaccurate effect size estimation.

*Power.* Power indicates the proficiency of a test to detect relationships existing in the population and the probability a statistical test would reject the null hypothesis when false (Anderson et al., 2011). A higher power indicates a high chance of detecting an actual difference, while a low power does not. Low statistical power demonstrates an “insufficiently powered experiment may incorrectly conclude that the relationship between treatment and outcome is not significant” (Shadish et al., 2002, p. 45). Measures to increase power in this study involve robust statistical tests, meeting assumptions of the statistical tests, increasing the sample size (Shadish et al., 2002), and utilizing G\*Power statistical software to calculate the sample size (Heinrich Heine Universitat Dusseldorf, 2021).

*Assumptions.* Violations of statistical test assumptions would either overestimate or underestimate the size and significance of an effect (Shadish et al., 2002). For example, if observations were not independent, the assumption of independence of errors

would not be met. Before implementing specific statistical tests, the researcher performed the required assumption procedures (Laerd Statistics, 2015, 2020).

*Fishing and error rate.* Fishing and error rate purport, if uncorrected for the number of tests, repeated tests for significant relationships would artifactually inflate statistical significance (Shadish et al., 2002). This researcher adhered to the assumption guidelines for statistical testing. If any, the researcher would document corrective procedures, though none would have a basis related to fishing through the data to ensure a significant effect.

*Measures.* Unreliability measures indicate that measurement errors weaken the relationship between two variables and strengthen or weaken the relationships among three or more variables (Shadish et al., 2002). According to Nunnally and Bernstein (1994), a conclusion about covariance would be inaccurate without measuring variables reliably. In this study, the assessment of reliability findings included the reporting for each measure.

*Reduced range.* “A reduced range on a variable usually weakens the relationship between it and another variable” (Shadish et al., 2002, p. 45). Pilot testing measures, selection procedures, and item response analysis would ensure the range did not weaken the relationship between variables. In this study, the researcher focused on the selection procedures. This study used a data collection service, Amazon Mechanical Turk (MTurk). Aguinias et al. (2021) claim that the use of MTurk increases the risk of clustering responses near lower or higher scores due to MTurk participants’ inattention, distracting environment, receipt of compensation, and response bias. The research followed guidelines noted in the literature and reviewed and examined data analysis

procedures, such as excluded responses or outliers (Laerd Statistic, 2015, 2020; Tabachnick & Fidell, 2013).

*Unreliability of Treatment.* Unreliability of treatment referred to a treatment “intended to be implemented in a standardized manner is implemented only partially for some respondents” (Shadish et al., 2002, p. 45). As a result, underestimation of effects could occur. All participants received the same treatment in this study to lessen the threat of treatment unreliability through the uniformity of self-selection, instructions, and distinct surveys (Shadish et al., 2002).

*Heterogeneity of Units.* Heterogeneity of units proposed “increased variability on the outcome variable within conditions increased error variance, making detection of a relationship more difficult” (Shadish et al., 2002, p. 45). This researcher set specific criteria to participate in the survey. The study procedures included documenting and reporting participants' demographics to identify homogenous characteristics correlated with significant outcomes (Shadish et al., 2002).

*Extraneous Variance.* Extraneous variance indicated some features of an experimental environment “may inflate error, making detection of an effect more difficult” (p.45). According to Aguinas et al. (2021), MTurk participants' environmental features affected their survey responses. Shadish et al. (2002) recognized the difficulty of controlling the environment in forcing attention to the survey. However, this study included procedures that encouraged awareness of survey responses through detailed instructions and inattention questions to determine if participants paid attention (Aguinas et al., 2021).

*Effect Size.* Inaccurate effect size estimation notes “some statistics systematically overestimate or underestimate the size of an effect” (Shadish et al., 2002, p. 45). Effect size explained the variance between two or more variables. The effect size varied depending on the statistical test (Creswell & Creswell, 2018). This study adheres to guidelines found in the research literature for effect sizes relative to the statistical tests. Cohen (1988) established guidelines for the effect size for various methods of statistical testing. Cohen (1988) identified a medium effect size of .30 for Pearson’s correlation and a medium .15 effect size for multiple regression analysis utilized in this study.

#### *Internal validity*

Internal validity refers to the validity of inferences about whether the relationship between two variables is causal. Hence, threats to internal validity apply to causal inferences. Causal inferences manipulate a variable and observe the outcome (Shadish et al., 2002). Shadish et al. (2002) state that correlation does not prove causation. The correlational method does not rule out a third possible explanation for the relationship of the two variables nor manipulates the variables. As this study utilizes a correlational approach, there are no threats to internal validity (Shadish et al., 2002).

#### *External validity*

External validity involves how the research would generalize beyond the results to other situations or people. External validity threats occur when researchers “draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (Creswell & Creswell, 2018, p. 171). Unlike conventional samples, researchers cannot randomly select from the target population, posing a threat to external validity (Cheung et al., 2017; Clifford & Jerit, 2014). Instead, MTurk participants self-



select themselves to participate (Burnham et al., 2018). Therefore, as recommended by Chandler and Paolacci (2017) and Casey et al. (2017), this study collected and reported detailed sample characteristics, which served as the criteria for the research to address the self-selection bias to reduce the threat of external validity.

### *Construct validity*

Construct validity “occurs when investigators use adequate definitions and measures of variables” (Creswell & Creswell, 2018, p. 247). It refers to whether inferences about test scores relative to the concepts are studied. This study relied on the established validity and reliability of the chosen surveys to measure the extent to which the instrument measures the intended construct (Shadish et al., 2012). Additionally, before data analysis, statistical tests for Cronbach alpha test the internal consistency of the study’s two scales, the EES and ZTPI-15. The following explains the instrumentation used the surveying participants for this research.

### Instrumentation

Creswell and Creswell (2018) identify quantitative surveys as an efficient means of collecting data. Quantitative surveys involve surveying a sample to evaluate the feedback of a population (Panke, 2018) to produce a snapshot of the peoples’ opinions, attitudes, and behaviors at a given time (Stangor, 2015). Surveys of self-report measures gather information in a relatively short amount of time from large groups of people (Panke, 2018). The online survey included two quantitative survey instruments, the Employee Engagement Scale (EES) and Zimbardo Time Perspective Inventory (ZTPI-15), to collect data, and one researcher-developed demographic questionnaire (See

Appendix B). This researcher utilized Qualtrics (2021) and linked the survey to MTurk participants.

Although other instruments are available to measure engagement, the EES is the first psychometrically reliable and valid scale for employee engagement from an agreed-upon definition and framework (Shuck, Adelson, & Reio, 2017). The ZTPI-15 scale includes the five subscales and remains a shorter version of the original ZTPI (See Appendix D; Zhang, Howell, & Bowerman, 2013; P. Zimbardo & Boyd, 1999). McCarty et al. (2006) suggest that it was more efficient to use short scales when measuring variables with two or more instruments. Additionally, the EES and the ZTPI-15 were chosen based on the low cost, ease of use, and strong validity. Next, the following section provides an overview of measurement instruments relative to engagement and time perspective studies and explains the measurement tools utilized in this study. Employee Engagement Scale

In response to previous studies on how best to measure engagement (Albrecht, 2010), there remains the need for an agreed-upon definition focusing on new measures encompassing Kahn's (1990) conceptualization and theory (Sak & Gruman, 2014) and a comprehensive theoretical framework for scholars and practitioners (Shuck & Reio, 2011; Shuck et al., 2014). Shuck, Adelson, and Reio (2017) developed the EES (See Appendix C). Shuck provides permission to use the EES for this study (See Appendix E). The EES remains grounded in Kahn's (1990) conceptualization of personal engagement, focusing on an individual's psychological experiences at work and measuring an individual's psychological state in specific moments of engaging or withdrawing personal resources in proportion to cognitive, emotional, and behavioral engagement. The

instrument measures how individuals think and feel about their work and form intentions towards the organizational role. The EES provides a snapshot of how employees perceive their workplace (See Appendix C).

Research relative to the development of the EES refers to individuals in the United States. However, the study suggests future use of the EES connected to different cultures would emphasize its applicability in other contexts (Shuck, Adelson & Reio, 2017; Turner, 2020). Shantz et al.'s (2013) study examine cultural differences relative to human capital, social capital, and cultural capital from a human resources perspective. The factors of individualism, power-distance, uncertainty avoidance, and religiosity measure low, medium, or high focus depended on the country (Shantz et al., 2013). Rothmann (2013) claims countries' individualism levels closely relate to their wealth, like the United States, Great Britain, and the Netherlands. Individualistic cultures consider their immediate family and their welfare. While developing countries, such as Columbia and Pakistan, practice collectivism. Collectivistic groups rely on the needs of the group and expect protection from the group. Power distance remains a measure of society's acceptance of unequally distributed power in institutions, such as high-power distance societies tolerate vast authority differences in organizations. To avoid feeling threatened, societal members with low uncertainty avoidance endured the uncertainty, remained content with risks, and remained tolerant of behavior and opinions. High uncertainty avoidance characteristics exhibit high anxiety levels, manifesting into "nervousness, stress, and aggression" (p. 166). Countries like Singapore, Switzerland, and Denmark have low avoidance uncertainty, while Japan, Portugal, and Greece exhibit high avoidance uncertainty (Rothmann, 2013). Moreover, the evidence of cross-cultural

differences notes the UWES-9 work engagement instrument includes other versions, such as the Italian (Balducci et al., 2010), Portuguese (Sinval et al., 2018), and Hebrew versions (Littman-Ovadia & Balducci, 2013). Therefore, the research supports the multi-cultural differences in the use of engagement instruments.

The measure aligns with a distinct definition as an active, positive state relative to work. The psychological state operates through the maintenance, intensity, and direction of cognitive, emotional, and behavioral energy (Shuck, Osam, et al., 2017). The EES is a 12 question, 5-point Likert scale, consisting of three subscales with four questions each. To measure, assign numbers 1 to 5, sum the full-scale items, and divide by twelve. Another way to measure the EES, assign numbers 1 to 5, add each item in the subscales (cognitive, emotional, behavioral), and divide each summed item by four. Table 3 shows the range of scores for each measurement strategy. The response choices range from 12 to 60 when using full scale and 4 to 20 using subscales. This study utilizes the full-scale option (Shuck, Adelson, & Reio, 2017).

Table 3

*Scoring Employee Engagement Scale*

EES	Number of Items	Range of Scores
Employee Engagement - Full Scale	12	12 to 60
Cognitive (subscale)	4	4 to 20
Emotional (subscale)	4	4 to 20
Behavioral (subscale)	4	4 to 20

*Note.* EES can be scored full scale or by subscales

The survey questions align with the subscales; cognitive engagement (e.g., *I am really focused when I am at work.*); emotional engagement (e.g., *I feel a strong sense of*

*belonging to my job.*); and behavioral engagement (e.g., *I am willing to put in extra effort without being asked.*). The response choices consist of (a) 1 = *strongly disagree*, (b) 2 = *disagree*, (c) 3 = *neutral*, (d) 4 = *agree*, and 5 = *strongly agree* (See Appendix C).

Fletcher and Robinson (2014) note some surveys avoid negative constructs, encouraging acquiescence bias. Acquiescence bias is a "tendency for individuals to agree or disagree with all items regardless" (p. 282) of the content. The EES avoids negative constructs as employee engagement refers to a positive state (Shuck, Adelson, & Reio, 2017). However, this study combines both the EES and the ZTPI-15. The ZTPI-15 includes negative constructs. The following section explains a sample of shortened time perspective instruments based on the original ZTPI by Zimbardo and Boyd (1999).

#### *Zimbardo Time Perspective Inventory 15-item*

Various researchers created shorter versions of the original 56-item ZTPI for research usefulness, such as the 15-item (McKay et al., 2014; Zhang, Howell, & Bowerman, 2013), 25-item (Laghi et al., 2013), 30-item (Carelli & Olsson, 2015), and 36-item scale (Sircova et al., 2014). However, research studies suggest the ZTPI assesses other constructs rather than temporal orientation (Crocket et al., 2009; Shipp et al., 2009; Worrell et al., 2013). Additionally, evidence varied regarding the psychometric properties of ZTPI scores (Carell et al., 2011; Worrell & Mello, 2007). Hence, scores on the shorter versions revealed mixed findings (McKay et al., 2014; McKay et al., 2015; Sircova et al., 2014). However, research proposes the original 56-item questionnaire prevents full instrument utility due to time constraints (Kostal et al., 2016).

Time perspective research includes numerous translations from the original English ZTPI instrument, such as the Portuguese, Italian, or German versions (Zimbardo

Time Perspective Inventory-ZTPI, 2009). A cross-cultural study utilizing the 36-item cross-cultural understanding of the ZTPI examines 23 countries to illustrate the percentage of time perspective profiles across country samples. The findings indicate similarities between the United States (40% future, 24% negative) and Algeria (35% future, 24% negative). Other study results reveal the highest balanced time perspectives are Estonia (47%), Israel (42%), Russia (35%), while countries like China (12%), Algeria (13%), Brazil (14%), and Mexico (14%), are some of the lowest. A fatalistic perspective remains highest in China (28%) and Mexico (19%), with the lowest scores in Turkey (3%), Estonia (4%), New Zealand (5%), United Kingdom (5%), Algeria (6%), and the United States (6%). The present perspective remains high in New Zealand (45%), with the next highest being Serbia (31%) and France (30%). China (9%), the United States (11%), Estonia (11%), Russia (14%), and Italy (14%) exhibit low present orientation. Countries exhibiting higher scores in a negative perspective in comparison to the others remain Algeria (24%), the United States (24%), China (22%), and France (21%). Those countries with higher future orientations remain the United States (40%), Brazil (37%), Algeria (35%), Portugal (34%), Russia (33%), and Italy and Turkey (32%). The lowest future orientation lies with New Zealand (13%) and Sweden and Serbia (19%) (Sircova et al., 2015). Sircova et al. (2014) claim the 56-item ZTPI remains a fit for individual-level analysis, while the ZTIP-36 remains reliable for country-level analysis.

Zhang, Howell, and Bowerman (2013) developed the shortened version of the original 56-item ZTPI, the 15-item ZTPI (ZTPI-15), allowing researchers to employ all of the time perspective orientations without overly burdening survey participants. In addition, creating a short version permits further investigation of unique associations each

time perspective had with associated outcomes. The ZTPI-15 short-form has proven successful in determining time perspectives and takes a fraction of the time to complete (Sword, 2011). The ZTPI-15 is a quality instrument for assessing time perspective (Kostal et al., 2016) and serves as a good proxy for the original 56-item ZTPI. Zhang, Howell, and Bowerman (2013) provide free access to the ZTPI-15 (See Appendix D).

As a public domain instrument, the ZTPI-15 requires the same permissions as the original ZTPI (Zimbardo Time Perspective Inventory-ZTPI, 2009). However, this researcher contacted a member of the Zimbardo team, who provided permission to use both documents and measurement procedures (See Appendix F). The ZTPI-15 is a 15 item, 5 points Likert scale (*1=very untrue, 2=untrue, 3=neutral, 4= true, 5= very true*).

Table 4

*Scoring Zimbardo Time Perspective Inventory-15 Scale*

ZTPI-15	Number of Items	Range of Scores
Time Perspective - Full Scale	15	15 to 75
Past-Negative (subscale)	3	3 to 15
Past-Positive (subscale)	3	3 to 15
Present-Fatalistic (subscale)	3	3 to 15
Present-Hedonistic (subscale)	3	3 to 15
Future (subscale)	3	3 to 15

*Note.* ZTPI-15 can be scored full scale or by subscales.

As shown in Table 4, the response choices range from 15 to 75. To measure, assign numbers 1 to 5, sum each item in the subscales (PN, PP, PF, PH, F), and divide each summed item by three. Another option is to utilize the full-scale, assign numbers 1 to 5, sum the full-scale items, and divide by fifteen. An optimal time perspective consists of high past-positive, present-hedonistic, and future levels and low levels on the past-

negative and present-fatalistic. The ZTPI-15 is a good fit for this study (Boniwell & P. Zimbardo, 2004; Boyd & P. Zimbardo, 2005; Stolarski, 2016; P. Zimbardo & Boyd, 1999, 2008). As shown in Table 5, this study uses the full-scale method for scoring the EES and the subscale method to score the ZTPI-15.

Table 5

*Study Scoring Method of Scales*

Scales	Number of Items	Range of Scores	
		EE	ZTPI-15
Employee Engagement - Full Scale	12	12 to 60	
Past-Negative (subscale)	3		3 to 15
Past-Positive (subscale)	3		3 to 15
Present-Fatalistic (subscale)	3		3 to 15
Present-Hedonistic (subscale)	3		3 to 15
Future (subscale)	3		3 to 15

*Demographic Questionnaire*

This researcher collected demographic information (See Table 6) from a researcher-developed instrument. The instrument provides data to collect descriptive statistics characterizing the sample. Participants' criteria to respond to the survey require working in the United States, 18 years or older, and employed in current position one year or more. Table 6 includes the demographics age, job tenure, gender, and industry. The survey also contains two MTurk inattention questions, numbers 13 and 23 (See Appendix B).



Table 6

*Survey Map Aligning Research Objectives and Survey Questions*

Research Objective Numbers	Research Objectives	Demographic Questions	EES Questions	ZTPI-15 Questions
RO1	Describe the demographic characteristics of sample participants (employed in the United States, age, employment status, job tenure, gender, and industry).	Q1-4		
RO2	Determine the relationship between past-negative and employee engagement.		Q5-12, &14-17	Q18-20
RO3	Determine the relationship between past-positive and employee engagement.		Q5-12, &14-17	Q21, 22, & 24
RO4	Determine the relationship between present-fatalistic and employee engagement.		Q5-12, &14-17	Q25-27
RO5	Determine the relationship between present-hedonistic and employee engagement.		Q5-12, &14-17	Q28-30
RO6	Determine the relationship between future and employee engagement.		Q5-12, &14-17	Q31-33
RO7	Determine the relationship between employee engagement and past-positive, past-negative, present-hedonistic, present-fatalistic, and future time perspectives.		Q5-12, &14-17	Q18-22, 24-33

Note. Questions 13 and 23 were MTurk inattention questions.

## Validity and Reliability of the Instruments

According to Phillips et al. (2013), a reliable survey “should provide consistent results over time” (p. 122), and a valid survey “should measure what it is intended to measure” based on the research objectives (p. 122). The following describes the four types of validity: (a) content validity means the survey measures all aspects of the research objectives (p. 122), (b) predictive validity indicates the extent scores predict future behaviors or results (p. 124), (c) construct validity signifies the survey measures the construct it claims to measure (p. 124), and (d) concurrent validity denotes the extent the survey agrees with results of other instruments that measure the same aspects (p. 124).

The researcher referred to the survey map (Table 6) to ensure adherence to research objectives and the stated statistical tests. Predictive validity, relative to the study’s predictive value, indicates the EES can predict employee engagement, and the ZTPI-15 can predict behaviors associate with time perspectives. The study used correlations and logical deductions in defending the construct validity of the survey. For concurrent validity, the researcher ensured consistent referral to survey objectives, developed procedures to reduce response bias, and assured objective administration of the survey (p. 124). Additionally, the study relied on the two published scales' reliability and validity (Shuck, Adelson, & Reio, 2017; Zhang, Howell, & Bowerman, 2013).

Cronbach’s alpha measured the scale's internal consistency (Field, 2013). The EES comprised a 12-item scale consisting of three subscales with four items per subscale as a measurement tool. A summation of scores on each scale item obtained the score for the full scale (See Appendix C). The range of possible scores for the subscales (four

items each) was 4 to 20, as each scale had four items measured on a 5-point Likert scale (Shuck, Adelson, & Reio, 2017). The three subscales included associated Cronbach alphas: cognitive 0.94, emotional 0.88, and behavioral engagement 0.91, and indicated an average of all scales 0.91.

The ZTPI-15 consisted of 15 items comprised of five subscales with three questions each. The range of possible scores for the five subscales was 5 to 15, as each subscale had three items measured on a 5-point Likert scale. As shown in Appendix D, the subscales corresponded to the subscale time orientations. Items 1- 3 measured past-negative, 4 - 6 measured past-positive, 7 - 9 measured present-fatalism, 10 -12 measured present-hedonism, and 13 -15 measured the future items the same as the original ZTPI; however, there was no reverse coding required (Zhang, Howell, & Bowerman, 2013). Test-retest reliability tests the measure to produce consistent results when the same scales test at different points in time (Field, 2013). Zhang, Howell, and Bowerman (2013) report the ZTPI-15 has test-retest reliability ( $\alpha = .73$ ). The summary of convergent, discriminant correlations and self-peer convergent correlations between the ZTPI-15 and the original 56-item ZTPI are (a) past-negative, .83, (b) past-positive, .79, (c) present-fatalistic, .78, (d) present-hedonistic, .80, and (e) future .72. Participants' responses to the Likert scale range from 1 (*very untrue*) to 5 (*very true*). The questionnaire asks, “how characteristic or true is this of me?” (See Appendix D). Comparison of the ZTPI-15 to the 56-item ZTPI report the ZTPI-15 has a test-retest reliability of ( $\alpha = .73$ ), similar to that of the original standard ZTPI ( $\alpha = .75$ ) (Zhang, Howell, & Bowerman, 2013).

## Institutional Review Board

The Institutional Review Board (IRB) is an oversight entity with the principal goal of protecting human subjects participating in research studies (Phillips et al., 2013). IRB reviews research plans to enforce federal regulations protecting human rights. The committee assesses the physical, psychological, social, and legal issues that may be potential risks to participants. The IRB reviews the experimental processes and informed consent for ethical problems, such as scientific research quality, to avoid wasting resources or ensuring adequate provisions to protect participants' privacy and safety (Creswell & Creswell, 2018; Shadish et al., 2002, Sieber, 1973).

The researcher completed an IRB application to obtain research approval, including an informed consent form. The study's survey (see Appendix B) consists of the Informed Consent information for participants to read before beginning the questionnaire. Before the data collection process, the study gained approval from The University of Southern Mississippi's IRB (IRB; see Appendix A), protocol number IRB-21-235, dated May 27, 2021.

## Data Collection

The methods to collect data are essential for research replication. Data collection procedures consist of the steps taken to conduct a study. The description of the data collection procedures in this study includes the data collection service, consent to participate, and response rate criteria. The research suggests data collection takes a long time; however, most MTurk participants complete assignments within a shorter timeframe, such as 12 hours or less (Aguinis et al., 2021; Roberts, 2010).

### *Data Collection Service*

The data collection service, MTurk, consists of task creators and paid task participants. Paid participants conduct tasks known as Human Intelligence Tasks (HITs). Task creators post surveys and provide monetary compensation to complete each HIT (Aguinas et al., 2021; Burnham et al., 2018). In this study, the researcher recruited participants through MTurk and embedded a link to Qualtrics directing MTurk participants to complete the online survey. For participants who self-selected the assignment and chose to finish the external HIT, no data is available to Amazon MTurk. The participants remain anonymous. The questionnaire did not ask for personally identifiable information, MTurk Worker IDs, or collect Internet Protocol (IP) addresses. Compensation codes in MTurk do not link to participants' IDs. This study used a survey completion code at the end of the survey that stayed the same for all participants rather than a unique code that identifies the link to survey responses (Aguinas et al., 2021; The University of Iowa, 2020).

### *Consent to Participate*

The study began upon approval of the IRB. With permission to activate the Qualtrics instrument via MTurk, publishing the survey followed. Before accessing the questionnaire, participants read the online Informed Consent document and checked a box stating, “Yes, I consent,” or “No, I do not consent,” indicating consent to participate. If the participant agreed to participate, they accessed the survey by clicking on “continue.” Those who did not consent received a message thanking them for their time and discontinued survey completion. Notification to participants included assurance of confidentiality of personally identifiable information, IP addresses, and survey responses.

Informed consent contained the purpose of the study, description of research, benefits, risks, confidentiality, and participants' assurance of IRB review. Rejection of HITs negatively impacts MTurk participants. The survey included eligibility criteria for HITs, compensation information, notification of inattention check questions, and consequences of failed inattention check to protect MTurk participants from rejections (Aguinas et al., 2021; The University of Iowa, 2020).

*Response Rate Criteria*

Online self-report instruments tend to have a low response rate (Dillman et al., 2014). Buhrmester et al. (2018) claim response rates for MTurk participants depend on study interest, amount of compensation, and survey length. This study monetarily compensates MTurk participants, and the questionnaire is short. This researcher paid \$1.25 a HIT, increasing to \$1.50, if necessary, to improve the response rate after two days. The researcher informed participants that receipt of payment would transpire within 72 hours of a completed HIT. Most MTurk assignments complete within 12 hours or less.

Table 7

*Data Collection Plan*

Days	Researcher Data Collection Tasks
Day 0	Obtain IRB approval.
Day 1	Activate survey on MTurk.
Days 1-3	Monitor response rate.
Day 3	Increase incentive (HIT) rate to increase participation, if necessary, to increase the response rate after two days.
Day 4	Distribute incentives (disperse pay through MTurk)
Days 5 - 18	Analyze data using SPSS

However, daily monitoring of response rate occurred. With an acceptable response rate, incentives were dispersed through MTurk (Aquinas et al., 2021). Once data collection was completed, data analysis using SPSS followed. Table 7 shows the data collection plan.

### Data Analysis

The study's participants rated their perceptions relative to employee engagement and time perspective through responding to survey questions developed by Shuck, Adelson and Reio (2017) and P. Zimbardo and Boyd (1999). Nominal data for a variable consists of labels or names identifying an attribute or element, while ordinal data exhibits the same properties; however, the order or rank of the information is meaningful. In addition, an interval scale displays ordinal data properties, and the expression of intervals between values stands as terms of a fixed measure of units (Anderson et al., 2011).

Before conducting the applicable statistical analyses related to the research objectives, the researcher tested the normality of participant data for time perspective and employee engagement. The Shapiro-Wilk tests whether a distribution of scores is significantly different from a normal distribution. A  $p$ -value of .05 or greater meets the normality assumption (Pituch & Stevens, 2016). "A significant value indicates a deviation from normality" (Field, 2013, p. 883). Suppose the Shapiro-Wilk test is non-significant ( $p > .05$ ). In that case, it indicates "the distribution of the sample is not significantly different from a normal distribution (i.e., it is probably normal)" (p. 185). Additionally, the central limit theorem states that samples over 30 take the shape of a normal distribution irrespective of the population from which the sample is drawn (Field, 2013).

Statistical analysis proceeded according to the study’s data analysis plan in Table 8. The nominal variables have no meaning except numbers represent names, and ordinal variables do not include differences between values with a ranking or logical order (Field, 2013). According to Huck (2008), “data is ordinal in nature if each person or thing being measured is put into one of several ordered categories” (p. 54).

Table 8

*Data Analysis Plan*

Research Objective	Variables	Scale	Statistical Test
RO1	Age	Ordinal	Frequency Distribution
	Job Tenure	Ordinal	Frequency Distribution
	Gender	Nominal	Frequency Distribution
	Industry	Nominal	Frequency Distribution
RO2	Past-Negative Time Perspective Employee Engagement	Interval Interval	Pearson product-moment correlation
RO3	Past-Positive Time perspective Employee Engagement	Interval Interval	Pearson product-moment correlation
RO4	Present-Fatalistic Time Perspective Employee Engagement	Interval Interval	Pearson product-moment correlation
RO5	Present-Hedonistic Time Perspective Employee Engagement.	Interval	Pearson product-moment correlation
RO6	Future Time Perspective Employee Engagement	Interval Interval	Pearson product-moment correlation
RO7	Time Perspective (I/V) PN, PP, PF, PH, F (D/V) Employee Engagement	Interval Interval	Multiple Linear Regression



The age scale for this study is ordinal. The question asks, “*To what age group do you belong*” 18-20, 21-25, 26-35, 36-45, 46-55, and 56 and older (See Appendix B). The questions for age have a logical ranking order with no differences between values, and each person belongs in a category. Job tenure uses an ordinal scale and asks, “*How long have you been in your current job?*” (See Appendix B) with a logical ranking selection; 1-3 years, 4-5 years, 6-10 years, and 11 years or more. Gender uses nominal scales as the numbers represent names; male, female, and prefer not to answer (See Appendix B). Industry uses nominal scales to represent industry names; financial activities, manufacturing, services industry, professional and business services, educational, healthcare, and not listed (See Appendix B). Interval variable scale is “data measured on a scale along the whole of which intervals are equal” (Field, 2013, p. 877). Table 8 displays the research objectives, variables, scale categories, and the statistical tests for analysis.

#### *Research Objective One*

A sequence of tests addressed each of the research objectives. For example, research objective one uses descriptive data analysis to examine whether the participants work in the United States, age, employment status, job tenure, gender, and industry. As shown in Table 12, frequencies and percentage distribution calculations on the demographics address the characteristics of participants.

#### *Research Objective Two through Six*

Research objectives two through six measure the strength of linear association between the associated time perspective subscales (past-negative, past-positive, present-fatalistic, present-hedonistic, and future) and employee engagement using Pearson’s

Product-Moment Correlation (Pearson’s correlation coefficient). Pearson’s correlation coefficient calculates the strength and direction of the linear covariation between two continuous variables and with no distinction between an independent or dependent variable using the statistical test (See Table 9) (Field, 2013; Laerd Statistics, 2020).

Table 9

*Continuous Variables of Pearson’s Correlation Coefficient*

Research Objective	Time Perspective Variables	Number of Items	Employee Engagement Variable	Number of Items
RO2	Past-Negative (PN)	3	Employee Engagement	12
RO3	Past-Positive (PP)	3	Employee Engagement	12
RO4	Present-Fatalistic (PF)	3	Employee Engagement	12
RO5	Present-Hedonistic (PH)	3	Employee Engagement	12
RO6	Future (F)	3	Employee Engagement	12

The coefficient measures the strength of the relationship between two variables displaying as an  $r$ . “The correlation coefficient ranges from -1 to +1” (Field, 2013, p. 121). The coefficient takes on the value of -1 (as one variable changes, the other changes the opposite) to +1 (as one variable changes, the other changes in the same direction). A zero value indicates one variable changes, and the other does not change (Field, 2013). The output includes the correlation coefficient  $r$ , number of participants, and the p-value (Laerd Statistics, 2020). The null hypothesis indicates no relationship between the two variables, and the p-value reports the null hypothesis (Anderson et al., 2011; Field, 2013;

Laerd Statistics, 2020). If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020).

Cohen's (1988) standard of evaluating the correlation coefficient in determining the strength of the relationship or the effect size proposes correlation coefficients between .10 and .29 signify a small or weak correlation, coefficients between .30 and .49 represent a medium or moderate correlation, and coefficients of .50 and above indicate a large correlation or relationship. Akoglu (2018) acknowledges the strength of  $r$  is reported differently by researchers in different fields. However, this study relies on the guidelines set by Cohen (1988).

Pearson's correlation coefficient analysis requires specific assumptions to be accurate; (1) continuous scale, (2) paired observations, (3) linearity, (4) no significant outliers, and (5) bivariate normality. There are three tests of assumptions using SPSS statistics: establishing a linear relationship, testing outliers reviewing scatterplots, and testing normality using the Shapiro-Wilk test (Field, 2013; Laerd Statistics, 2020).

Assumption one indicated the two variables in this study measure on a continuous scale (Laerd Statistics, 2020). According to Field (2013), a continuous variable indicates a score for each participant could take on any value relative to the measurement scale utilized. In this study, a continuous type of variable, interval, represents equal distances in measurement properties. Assumption two paired observations mean each participant has two values. Research objectives two through six investigated the relationship between two variables; therefore, each participants' case comprised paired observations. After setting up the two variables in SPSS using a variable view window and entering data into

the data view window, a chart builder tested assumptions two and three simultaneously by displaying a single scatterplot. Assumption three required a linear relationship between the two variables, and the scatterplot was visually inspected (Laerd Statistics, 2020).

For assumption four, no outliers could be present in the data. To verify, the researcher visually observes a scatterplot and standardization of the output by reviewing z-scores exceeding  $\pm 3.29$  (Laerd Statistics, 2020; Tabachnick & Fidell, 2013). Outliers are data points not following a similar pattern. Thus, a scatterplot could identify the outliers when tested for linearity (Laerd Statistics, 2020).

Assumption five, bivariate normality, necessitated using inferential statistics to satisfy bivariate normality. The researcher tested for normality using the Shapiro-Wilk test (Laerd Statistics, 2020). If bivariate normality existed, both variables would have a normal distribution. If the values were greater than .05, both variables would meet the assumption (Field, 2013; Laerd Statistics, 2020). However, the central limit theorem guidelines state that with samples over 30, the sampling distribution becomes a normal distribution regardless of “the shape of the population from which the sample is drawn” (Field, 2013, p. 871).

#### *Research Objective Seven*

Research Objective Seven used multiple linear regression analysis to predict continuous dependent variables given two or more independent variables and how much the independent variables explained the variation of the dependent variable over and above the mean model. Thus, multiple regression analysis determined the model's overall fit and the relative contribution of each predictor to the total variance explained (Laerd

Statistics, 2015). This study aimed to determine how much variation in employee engagement was explainable by each predictor variable of time perspective. This objective consisted of five independent variables and a dependent variable of employee engagement (See Table 10).

A multiple regression analysis aims to find a linear combination of independent variables that makes the best prediction of a single quantitative dependent variable in the sense that it minimizes the squared deviations around a line of best fit (Pituch & Stevens, 2016). The regression model fits the data, determines the variation in the dependent variable explained by the independent variables, and tests the study's regression equation hypotheses. The coefficient of determination,  $R^2$ , consists of any value between zero and one, is the statistical expression of how well the regression model fits the data output.  $R^2$  measures the percentage of the total variation in the dependent variable reported by the independent variable (Field, 2013; Laerd Statistics, 2015).

Table 10

*Independent Variables, Dependent Variable*

Research Objective	Number of IV	Time Perspective IV	Employee Engagement DV
RO7	1	Past-Negative (PN)	Employee Engagement
	2	Past-Positive (PP)	
	3	Present-Fatalistic (PF)	
	4	Present-Hedonistic (PH)	
	5	Future (F)	

$R^2$  represents the proportion of variance for a dependent variable explained by the independent variables. At the same time, the adjusted  $R^2$  adjusts for the number of

predictors in a model and sample size. Adding more variables to the multiple regression model tends to increase though never decreases  $R^2$ , thus encouraging researchers to add more. The adjusted  $R^2$  takes into account the number of predictor variables and decreases if the new variable does not add to the explanatory power of the model (Brace et al., 2016; Huck, 2008). According to Brace et al. (2016), the “adjusted  $R^2$  value gives the most useful measure of the success of the model” (p. 25). This study reported both.

According to Laerd Statistics (2015), the process of selecting a multiple regression involves checking to ensure that the study's data can be analyzed using the statistical test. Multiple linear regression has eight assumptions to consider providing information about the accuracy of the study predictions. Violations of the assumptions require corrections and re-testing (Laerd Statistics, 2015). The following describes the assumptions of multiple regression. The first two assumptions relate to study design, and three through eight relate to how the data fits the multiple regression model.

Multiple linear regression analysis requires eight assumptions to be true: (1) must have one dependent variable measured at the continuous level; (2) must have two or more independent variables measured at the continuous or nominal level; (3) independence of errors; (4) a linear relationship between the predictor variables and the dependent variable; (5) homoscedasticity of residuals; (6) no multicollinearity; (7) no significant outliers, high leverage points or highly influential points; and (8) the errors (residuals) should be approximately normally distributed (Laerd Statistics, 2015).

Assumption One submits there must be one dependent variable measuring at the continuous scale level of interval or ratio. This study contains one dependent variable

measuring at the interval scale level. Employee engagement is the dependent (outcome, target, criterion) and the five independent variables of time perspective (See Table 10).

Assumption Two must have two or more independent variables measured at the continuous or nominal level. This study contains five independent variables measuring at the interval level. As shown in Table 10, the independent variables of time perspective orientations are (a) past-negative, (b), past-positive, (c) present-fatalistic, (d) present-hedonistic, and (e) future.

Assumption Three, independence of errors, refers to adjacent correlated observations. Observations in multiple regression must not be related, and the Durbin-Watson statistic verifies if related or not. The Durbin-Watson statistic can range from 0 to 4, but looking for a value of approximately 2 to indicate no correlation between residuals. If the value is close to two, it can be accepted there are no independence of errors. Requirement for reporting the information; residuals were independent, as assessed by a Durbin-Watson statistic number. The test statistic varies from 0 to 4. A value of 2 indicated no correlation of residuals. A value  $>2$  indicated a positive correlation between adjacent residuals. Values  $< 1$  and  $> 3$  are a cause for concern (Field, 2013; Laerd Statistics, 2015, Watson & Durbin, 1951).

Assumption Four states there must be a linear relationship between (1) the dependent variable and each independent variable and (2) the dependent variable and the independent variables collectively. Separate tests analyze each, and the order of testing does not matter. The tests required; (1) a partial regression plot between each independent and dependent variable and (2) a scatterplot of residuals against the predicted values. A review of the partial regression plot determined linearity. If the residuals form a

horizontal band, the relationship between the dependent and independent variables is linear (Field, 2013; Laerd Statistics, 2015).

Assumption Five, homoscedasticity of residuals, meaning equal error variances, assumes all residuals are equal for all the predicted dependent variable values. Thus, the variances along the line remain similar, moving down the line. Use the previous scatterplot checking for linearity to check for heteroscedasticity. Because the plotted residuals against the unstandardized predicted values already occurred at earlier testing, assumption five described how to interpret this plot and determined if the variables met or violated the assumption. If there was homoscedasticity, the residuals spread out, not increasing or decreasing, moving across predicted values. Conversely, the spread of residuals may appear as a funnel or fan shape (Field, 2013; Laerd Statistics, 2015).

Assumption Six data must not show multicollinearity. Multicollinearity happens when two or more independent variables are highly correlated, leading to problems understanding which independent variable contributes to the variance described in the dependent variable (Laerd Statistics, 2015). Additionally, there may be technical issues in calculating the multiple regression model. For example, Hair et al. (2014) state that if tolerance values  $> .1$ , there is no problematic collinearity in the particular data set. Or, if reviewing the variance inflation factor (VIF), any  $VIF > 10$  indicates multicollinearity.

An examination of correlation coefficients and Tolerance/VIF values; and interpreting the correlation coefficients and Tolerance/VIF values can determine whether the study's data meets or violates the assumption. Tolerance and VIF values are reciprocal measures; therefore, use one. Tolerance levels  $< .1$  suggest an issue, and  $> .1$



indicate confidence there is no multicollinearity. The Tolerance/VIF values generate multiple regression functions (Laerd Statistics, 2015, Pituch & Stevens, 2016).

Assumption Seven, no significant outliers, high leverage points, or highly influential points are different terms representing observations in the data set that are unusual. Each reflects a different impact on the regression line. An observation classification of more than one type negatively affects the regression equation used to predict the dependent variable's value about the independent variables. To detect outliers requires case-wise diagnostics and studentized deleted residuals (Field, 2013; Laerd Statistics, 2020). Using the standardized residuals (converted to z-scores becomes the studentized residuals) provides guidelines to identify outliers using the parameters of  $\pm 3.29$  (Field, 2013). Additionally, review the casewise diagnostics to ensure no standardized residual greater than  $\pm 3$  exists. The Cook's Distance test checked for influential points. Cook's Distance measures the change in regression coefficients that would occur when deleting a point, revealing which cases more strongly affect the regression model (Cook, 1977; Field, 2013; Laerd Statistics, 2015; Pituch & Stevens, 2016). According to Cook (1977), the values for Cook's distance  $> 1$  indicate a concern.

Assumption Eight, the errors should be approximately normally distributed. The residuals must be approximately normally distributed to run inferential statistics. Two standard methods to check for the assumption of normality of the residuals are: (a) a histogram and a P-P Plot; or (b) a Normal Q-Q Plot of the studentized residuals (Laerd Statistics, 2015).

## Summary

Chapter III outlined the procedures necessary to develop a quantitative study. The study tests “objective theories by examining variables” (Creswell & Creswell, 2018, p. 250). Variables included time perspective and employee engagement. A correlational research design examines the relationship and strength between the variables. A description of the inferential statistical tests explains procedures for Pearson’s correlation coefficient and multiple regression analysis. The researcher includes a description of the MTurk data collection service, instrumentation, research objectives, statistical assumption testing, and data collection and analysis procedures. Next, Chapter IV provides details of data collection and statistical analysis results. Chapter V presents the findings, a discussion, recommendations, limitations, and concluding remarks.

## CHAPTER IV – ANALYSIS OF THE DATA

The study's purpose is to examine the relationship between employee engagement and time perspective. Employee engagement remains an individual's personal psychological experience and the distinctive interpretation of the work setting (Khan, 1990; Shuck, 2019; Shuck & Reio, 2011; Shuck & Wollard, 2010). Therefore, the researcher examined whether time perspective orientations, individually as in research objectives two through six and together in research objective seven, had a relationship with employee engagement. This chapter presents the findings from the data collection and analyses.

The chapter begins with the pre-analysis data to adjust for outliers, missing responses, MTurk inattention responses, and adherence to criteria. Then, descriptive statistics describe the trends of characteristics in the sample participants for research objective one. Then, inferential statistical tests, Pearson's correlation coefficient, and multiple regression analyses address the research objectives.

Statistical significance for all inferential statistical analyses was evaluated at the accepted level,  $\alpha = .05$ . The alpha level is the probability of making a Type I error. "A commonly accepted alpha value is .05", which refers to a 5% probability of a Type I error (Creswell & Creswell, 2018, p. 173). An alpha level of .1 increases the researcher's chances of incorrectly rejecting the null hypothesis. A Type I error denotes the risk taken that the null hypothesis is true but still rejected.

In contrast, an alpha level of .01 encompasses a smaller area increasing the chances of not rejecting the null hypothesis when the researcher should, which is a Type II error. Type II error states when the null hypothesis is false but mistakenly fails to

reject. Therefore, an alpha level of .05 is a conservative approach (Laerd Statistics, 2018). Next, the following section explains the data collection results.

### Data Collection Results

The eligibility criteria to participate in this research consisted of ages 18 years or older, working in the United States 35 hours or more per week, and been in their current position one year or more. Data was collected using surveys consisting of the Employee Engagement Scale (EES), the Zimbardo Time Perspective Inventory short form comprising fifteen questions (ZTPI-15), and a researcher-developed demographic instrument. The study variables include employee engagement and time perspective. The following explains the excluded responses.

#### *Excluded Responses*

A total of 166 MTurk respondents consented and volunteered to participate in the survey. Of the total respondents, the researcher excluded twenty-six incomplete surveys. Four MTurk participants' responses were excluded for answering the inattention question. The following explains the process of managing the outliers.

#### *Outliers*

Outliers were examined by standardizing the scores into z-scores beyond  $\pm 3.29$  standard deviations from the mean and two applicable cases eliminated from further analysis (Field, 2013; Tabachnick & Fidell, 2013). One outlier was identified for employee engagement by reviewing scatterplots, and three for time perspective. A review of the four cases indicated acquiescence and social desirability bias. After all reductions, the participant sample totaled 130.

## Results of Statistical Analysis

Statistical analysis was performed using a sequence of Shapiro-Wilk tests to explore the normality assumptions. The null hypothesis for the Shapiro-Wilk test states that a variable is normally distributed in a population. Shapiro-Wilk tests indicate the tests were not statistically significant for employee engagement and time perspective ( $p = .60$ ) and ( $p = .180$ ), respectively, indicating the assumption of normality was met. Both results indicate  $p > .05$ , failing to reject the null hypotheses (Field, 2013; van den Berg, 2021).

The subscales of time perspective indicate the Shapiro-Wilk test was statistically significant; therefore, normality was not met. The scores show, Past-Negative  $p < .001$ , Past-Positive ( $p < .001$ ), Present-Fatalistic ( $p < .001$ ), Present-Hedonistic ( $p = .001$ ), and Future ( $p < .001$ ). However, the central limit theorem asserts that the sampling distribution takes the shape of a normal distribution no matter the shape of the sample population when the sample is 30 or above (Field, 2013). The central limit theorem explains “that the sum of independent observations having any distribution whatsoever approaches a normal distribution as the number of observations increases” (Pituch & Stevens, 2016, p. 224). Furthermore, violations of normality are not a problem if the sample cases are greater than 50, even for distributions departing markedly from normality (Bock, 1975; Pituch & Stevens, 2016).

The Cronbach’s alpha test assesses the internal consistency of the two scales, EES and ZTPI-15, and the subscales of time perspective. Guidelines for evaluating and interpreting the alpha values vary among research books and journals (e.g., Appelbaum et al., 2018; Clark & Watson, 1995; Fornell & Larcker, 1981; George & Mallery, 2020;

Kline, 2000; Nunally, 1978; Pedhazur & Schmelkin, 1991; Rossiter, 2018). Cortina (1993) suggests a cautious approach to guidelines since Cronbach’s alpha value can depend on the number of scale items. Temple et al. (2019) refer to Clark and Watson’s (1995) assertion that a score of .60 is acceptable for research purposes, “especially when applied to broad constructs such as time perspective” (p. 1175). Fornell and Larcker (1981) offer .50 represents a meaningful amount of explained variance relative to scale length. While Streiner (2003) asserts that the alpha may decrease when shortening scales, although not automatically decreasing reliability.

According to Temple et al. (2019), the ZTPI-15 subscales range in Cronbach’s alpha; “Past-Negative .66 (.61- .70), Past-Positive .67 (.62 - .71), Present-Fatalistic .67 (.62 - .71), Present-Hedonistic .55 (.48 - .61), and Future .53 (.46 - .59)” (Temple et. al, 2019; Supplemental Table 3). Table 11 contains descriptive statistics for each scale and the subscales relative to the study. The EES had a Cronbach alpha coefficient of .81, which is acceptable according to George and Mallery’s (2020) guidelines, whereby  $\alpha > .80$ , indicating the scale has good internal reliability (See Table 11). The ZTPI-15 had a

Table 11

*Psychometric Properties for Scales*

Scales	M	SD	Min	Max	Cronbach's Alpha	Number of Items
Employee Engagement	3.96	.477	3	5	.81	12
Time Perspective	3.47	.476	2.27	4.67	.73	15
Past-Negative	3.14	.875	1	4.67	.71	3
Past-Positive	3.74	.701	2	5	.61	3
Present-Fatalistic	3.26	.777	1.33	5	.58	3
Present-Hedonistic	3.31	.872	1	5	.62	3
Future	3.94	.633	2.33	5	.54	3

Cronbach alpha of .73. However, according to previous research, Cronbach’s alpha calculation for the ZTPI-15 and the subscales remain in the range of acceptability (Clark & Watson, 1995; Fornell & Larcker, 1981; Temple et al., 2019; Zhang, Howell, & Bowerman, 2013).

*Research Objective One*

*ROI: Describe the demographic characteristics of the participant's age, job tenure, gender, and industry.*

Table 12

*Characteristics of Participants*

Characteristics of Participants	<i>n</i>	%	Cumulative %
<b>Age</b>			
21-25	21	16.2	16.2
26-35	78	60	76.2
36-45	22	16.9	93.1
46-55	9	6.9	100
Total	130	100	
<b>Job Tenure</b>			
1-3 years	28	21.5	21.5
4-5 years	65	50	71.5
6-10 years	23	17.7	89.2
More than 10 years	14	10.8	100
Total	130	100	
<b>Gender</b>			
Male	94	72.3	
Female	36	27.7	
Total	130	100	

Table 12 (Continued)

Characteristics of Participants	<i>n</i>	%	Cumulative %
Industry			
Financial Activities	23	17.7	
Manufacturing	30	23.1	
Services Industry Professional & Business	18	13.8	
Services	44	33.8	
Educational	3	2.3	
Healthcare	5	3.8	
Not listed	7	5.4	
Total	130	100	

### *Research Objective Two*

*RO2: Determine the relationship between past-negative time perspective and employee engagement.*

Addressing research objective two involved conducting a Pearson's correlation coefficient test to determine if a relationship exists and the strength of the association between the past-negative orientation of time perspective and employee engagement (Field, 2013). Before analysis, the assumption of linearity was tested between past-negative and employee engagement by visually evaluating the scatterplot in Figure 2. The scatterplot indicated a weak positive linear relationship rising from left to right. The determination of outliers was visually reviewed using the scatterplot in Figure 2.

Pearson's correlation coefficient was computed to assess if a relationship existed between past-negative and employee engagement. Table 13 displays the output resulting in  $r(130) = .07$ ,  $p = .404$ . According to Cohen (1988), a correlation value between .10 and



.29 indicates a small or weak relationship. According to Field (2013) and Laerd Statistics (2020), a significance level greater than .05 indicates no significant relationship.

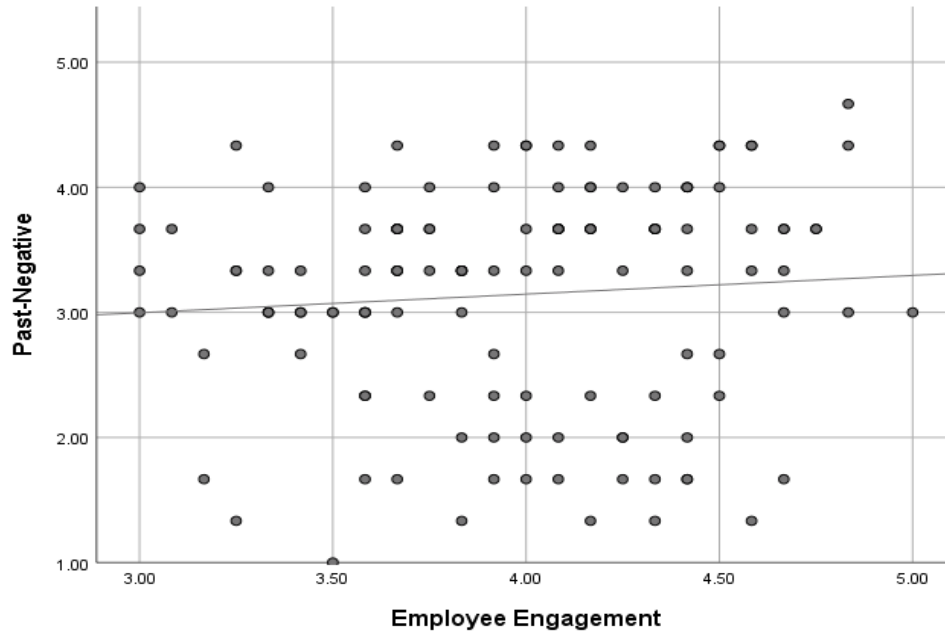


Figure 2. Scatterplot between past-negative and employee engagement

As shown in Table 13, the output indicates no significant relationship exists between past-negative and employee engagement. The null hypothesis suggests no relationship between the two variables, and the p-value reports the null hypothesis (Anderson et al., 2011; Field, 2013; Laerd Statistics, 2020). If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables. If the p-value is greater than the alpha level (significance level such as .05), fail to reject the null hypothesis and conclude no relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020). The results indicate the null hypothesis had no statistically significant relationship; therefore, the researcher failed to reject the null hypothesis.

Table 13

*Pearson's Correlation Past-Negative and Employee Engagement*

Variables	<i>r</i>	Sig.	n
Past Negative and Employee Engagement	.07	.404	130

*Research Objective Three*

*RO3: Determine the relationship between past-positive time perspective and employee engagement.*

Addressing research objective three involved conducting a Pearson's correlation coefficient test to determine if a relationship exists between past-positive and employee engagement and the strength of the association (Field, 2013). Before analysis, the assumption of linearity was tested between past-positive and employee engagement by visually evaluating the scatterplot in Figure 3. The scatterplot indicates a positive linear relationship rising from left to right. Next, the assumption determining outliers was visually reviewed using the scatterplot in Figure 3 to satisfy the assumption of no significant outliers.

Pearson's correlation coefficient was computed to assess a relationship between past-positive and employee engagement (Laerd Statistics, 2020). Table 14 displays the output resulting in  $r(130) = .38, p < .001$ . According to Cohen (1988), a correlation value between .30 and .49 indicates a medium or moderate relationship. The significance level was less than .001, thus indicating a significant moderate linear relationship between past-positive and employee engagement. The significance level shows that the outcome was not likely due to chance since the significance was less than .05 (Laerd Statistics, 2020; Field, 2013). The null hypothesis indicates no relationship between the two

variables, and the p-value reports the null hypothesis (Anderson et al., 2011; Field, 2013; Laerd Statistics, 2020). If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables. If the p-value is greater than the alpha level (significance level such as .05), fail to reject the null hypothesis and conclude no relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020). The researcher can reject the null hypothesis because there was a statistically significant relationship (Cohen, 1988; Laerd Statistics, 2020). Additionally, the result indicates increased employee engagement when past-positive orientation increases (Laerd Statistics, 2020).

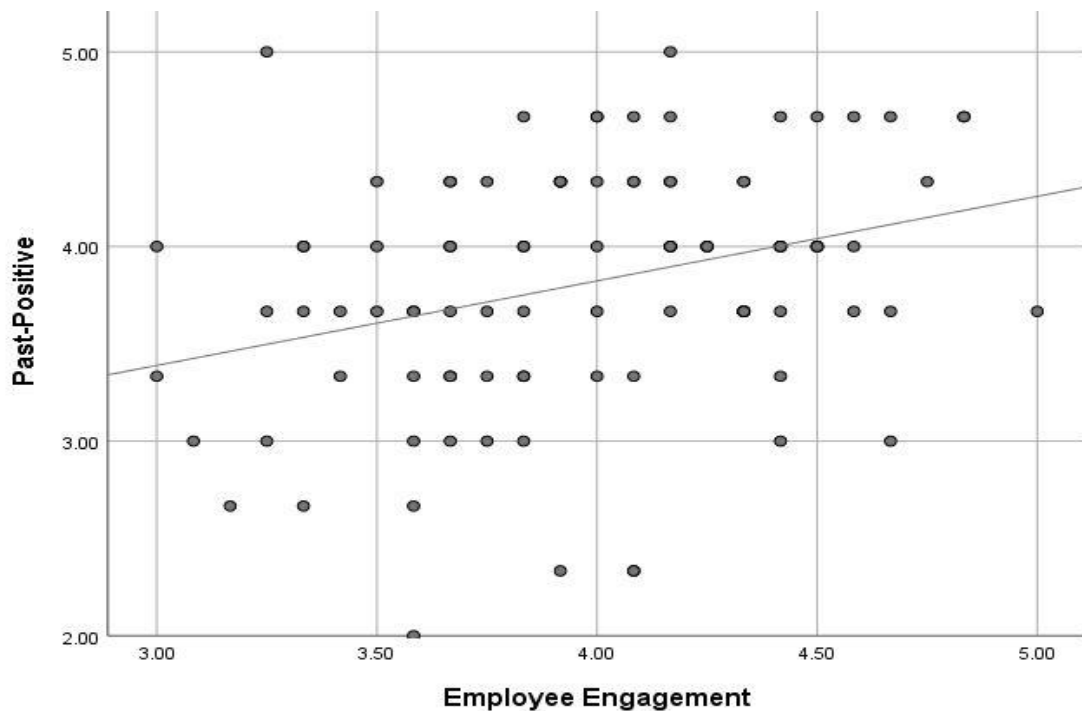


Figure 3. Scatterplot between past-positive and employee engagement

Table 14

*Pearson's Correlation Past-Positive and Employee Engagement*

Variables	<i>r</i>	Sig.	n
Past-Positive and Employee Engagement	.38	.001**	130

\*\* Correlation is significant at 0.01 level.

*Research Objective Four*

*RO4: Determine the relationship between present-fatalistic time perspective and employee engagement.*

Addressing research objective four involved conducting a Pearson's correlation coefficient test to determine if a relationship existed between present-fatalistic time perspective and employee engagement and the strength of the association (Field, 2013). Before analysis, the assumption of linearity was tested between present-fatalism and employee engagement by visually evaluating the scatterplot in Figure 4. The scatterplot indicates a weak positive linear relationship rising from left to right. Next, the determination of outliers was visually reviewed using the scatterplot in Figure 4 to satisfy the assumption of no significant outliers.

Pearson's correlation coefficient was computed to assess a relationship between present-fatalistic and employee engagement (Laerd Statistics, 2020). Table 15 displays the output resulting in  $r(130) = .17$ ,  $p = .057$ . According to Cohen (1988), a correlation value between .10 and .29 indicates a small or weak relationship. If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables. If the p-value is greater than the alpha level (significance level such as .05), fail to reject the null hypothesis and conclude

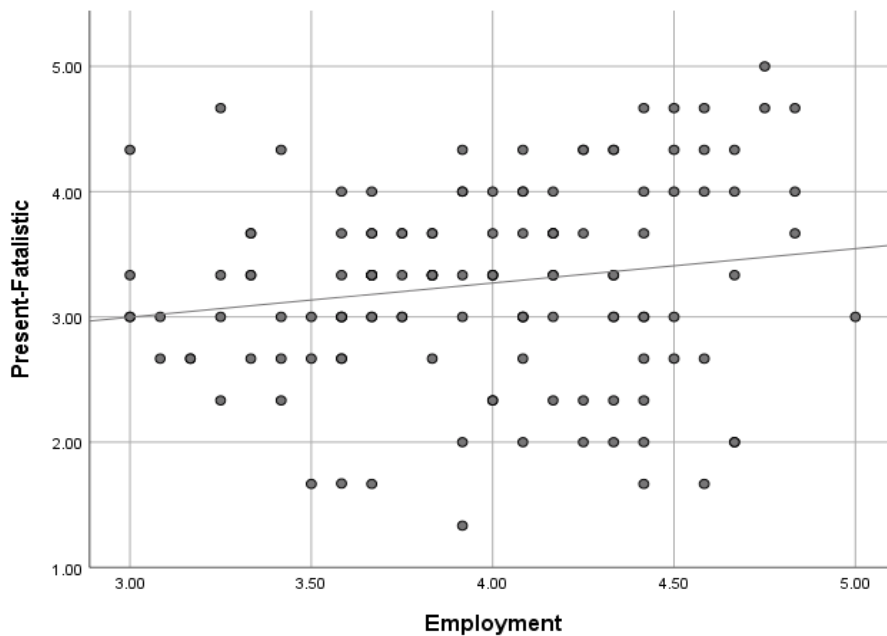


Figure 4. *Scatterplot between present-fatalistic and employee engagement*

no relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020). The significance level was greater than .05, thus indicating no significant relationship exists between present-fatalistic and employee engagement. Because there was no statistically significant relationship, the researcher failed to reject the null hypothesis (Cohen, 1988; Laerd Statistics, 2020).

Table 15

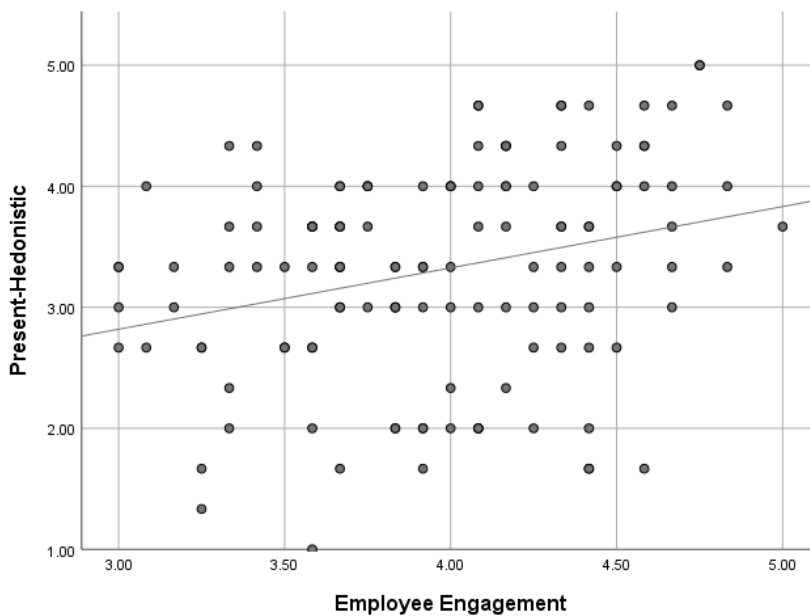
*Pearson's Correlation Present-Fatalistic and Employee Engagement*

Variables	<i>r</i>	Sig.	n
Present-Fatalistic and Employee Engagement	.17	.057	130

*Research Objective Five*

*RO5: Determine the relationship between present-hedonistic time perspective and employee engagement.*

Addressing research objective five involved conducting a Pearson's correlation coefficient test to determine a relationship between present-hedonistic time perspective and employee engagement. Before analysis, the assumption of linearity was tested between present-hedonistic and employee engagement by visually evaluating the scatterplot in Figure 5. The scatterplot indicates a positive linear relationship rising from left to right. Next, the assumption determining outliers was visually reviewed using the same scatterplot in Figure 5 (Laerd Statistics, 2020). Finally, Pearson's correlation coefficient was computed between present-hedonistic and employee engagement after examining the Figure 5 scatterplot with no outlier or an outlier removed before calculating the correlation coefficient to satisfy the assumption of no significant outliers (Laerd Statistics, 2020).



*Figure 5. Scatterplot between present-hedonistic and employee engagement*

Pearson's correlation coefficient was computed to assess a relationship between present-hedonistic and employee engagement (Laerd Statistics, 2020). Table 16 displays the output resulting in  $r(130) = .28, p = .001$ . According to Cohen (1988), a correlation value between .10 and .29 indicates a small or weak relationship. The null hypothesis indicates there is no relationship between the two variables. If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables. If the p-value is greater than the alpha level (significance level such as .05), fail to reject the null hypothesis and conclude no relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020). The results indicate significance level was less than .05, thus indicating a significant but small relationship between present-hedonistic and employee engagement. The significance level shows it is not likely that the outcome was due to chance since the significance was less than .05. Because there was a statistically significant relationship, the researcher can reject the null hypothesis. The result indicates there was an increase in employee engagement when present-hedonistic increased.

Table 16

*Pearson's Correlation Present-Hedonistic and Employee Engagement*

Variables	<i>r</i>	Sig.	n
Present-Hedonistic and Employee Engagement	.28	.001**	130

\*\*Correlation is significant at 0.01 level.

### *Research Objective Six*

*RO6: Determine the relationship between future time perspective and employee engagement.*

Addressing research objective six involved conducting a Pearson's correlation coefficient test to determine a relationship between future time perspective and employee engagement. Before analysis, the assumption of linearity was tested. The scatterplot in Figure 6 indicates a positive linear relationship rising from left to right. Pearson's correlation coefficient was computed between future and employee engagement after examining the Figure 6 scatterplot with no outlier or an outlier removed before calculating the correlation coefficient to satisfy the assumption of no significant outliers (Laerd Statistics, 2020).

Pearson's correlation coefficient was computed to assess if a relationship exists between the future and employee engagement. Table 17 displays the output showing that  $r(130) = .40, p < .001$ ). According to Cohen (1988), a correlation value between .30 and .49 indicates a medium or moderate relationship. The null hypothesis indicates there is no relationship between the two variables. If the p-value is less than the alpha level (significance level such as .05), reject the null hypothesis and conclude a relationship exists between the two variables. If the p-value is greater than the alpha level (significance level such as .05), fail to reject the null hypothesis and conclude no relationship exists between the two variables (Field, 2013; Laerd Statistics, 2020). The results indicate the significance level was less than .001, indicating a significant moderate relationship between future and employee engagement. The significance level shows it is not likely that the outcome was due to chance since the significance was less than .05



(Laerd Statistics, 2020; Field, 2013). The researcher can reject the null hypothesis because there was a statistically significant relationship (Laerd Statistics, 2020). The results indicate when future focus increases, employee engagement increases.

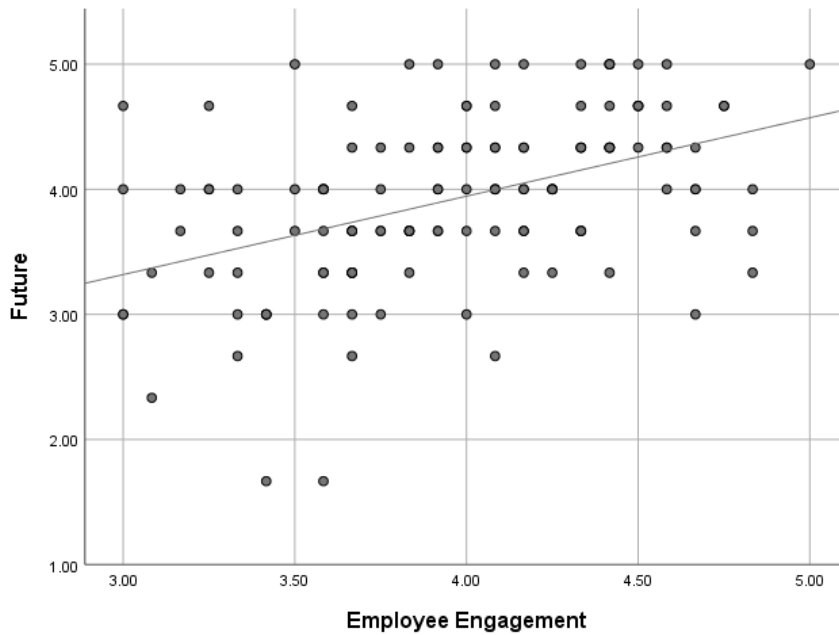


Figure 6. Scatterplot between future and employee engagement

Table 17

Pearson's Correlation Future and Employee Engagement

Variables	<i>r</i>	Sig.	n
Future and Employee Engagement	.40	.000**	130

\*\*Correlation is significant at 0.01 level.

### *Research Objective Seven*

*RO7: Determine the relationships between the orientations of time perspective and employee engagement.*

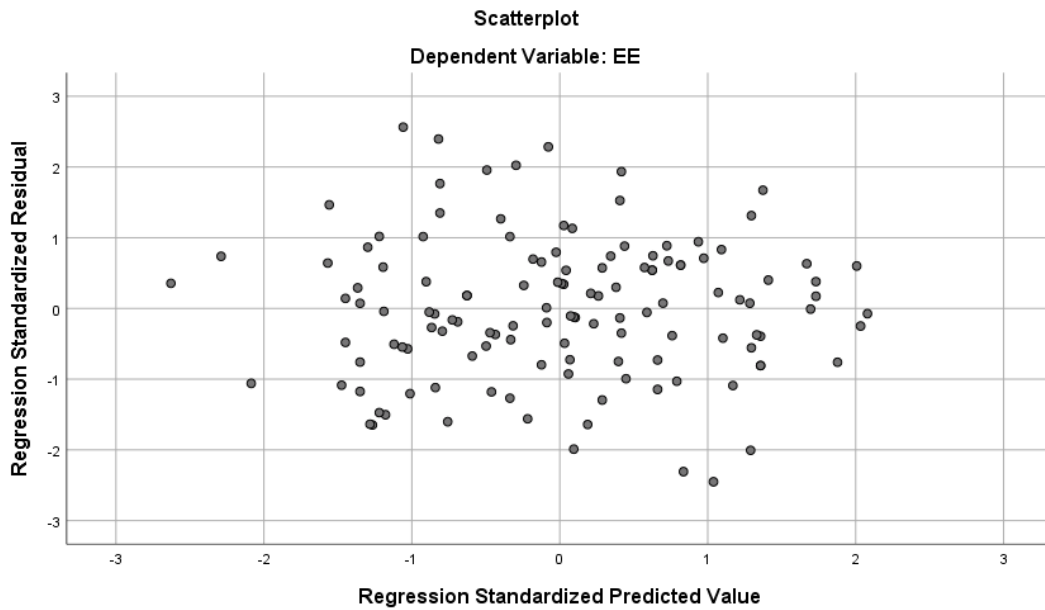
Addressing research objective seven involved conducting a multiple regression analysis to demonstrate the strength of association between variables (George & Mallery, 2020). Before analysis, the assumption of linearity associated with the five independent variables of time perspective and the dependent variable of employee engagement were tested. The assumption of linearity was not met for two independent variables; past-negative and present-fatalistic. The two variables were not a fit for the model. Therefore, the regression analysis reduces the independent variables from five to three.

Before analysis, the assumption of linearity was addressed with the three independent variables of time perspective and the dependent variable of employee engagement. According to Laerd Statistics (2015), to assess linearity, visually review a scatterplot of studentized residuals against the predicted values (Figure 7) and partial regression plots and with data forming a horizontal band. The assumption of linearity requires reviewing a scatterplot. The scatterplot data distribution shape was horizontal, thereby meeting the assumption. To meet the assumption of homoscedasticity requires inspecting a scatterplot. The assumption of homoscedasticity was met due to the random scatter rather than a funnel or fan shape (See Figure 7).

The independence of errors assumption indicates for any two observations, the residuals should be uncorrelated. The testing of the independence of errors assumption uses the Durbin-Watson test resulting in a value of 1.726. The values can range between 0 to 4, but the values closest to 2 indicate no correlation of residuals. The independence

of residuals as assessed by the Durbin-Watson statistic was met (Field, 2013; Laerd Statistics, 2015).

To determine the normality assumption required visually examining a P-P Plot and Q-Q Plot (Tabachnick & Fidell, 2013). Laerd Statistics (2015) states that data points should align along the diagonal line. As shown in Figures 8 and 9, the PP-Plot and Q-Q plot indicate an approximately normal distribution, meeting normality's assumption.



*Figure 7. Scatterplot of residuals to test linearity and homoscedasticity*

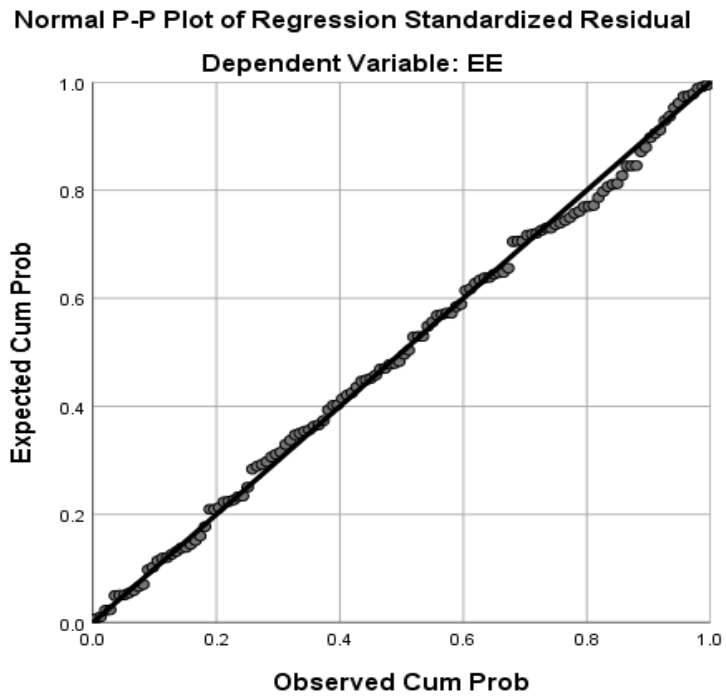


Figure 8. Normal P-P Plot with time perspective predicting employee engagement

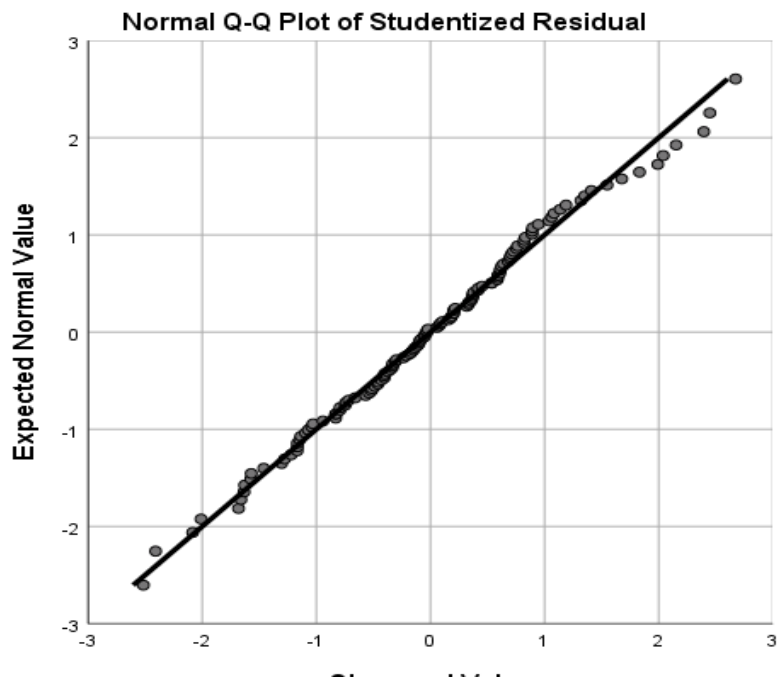


Figure 9. Normal Q-Q Plot of Studentized Residuals.

According to Laerd Statistics (2015), to determine if the regression model meets the assumption of multicollinearity, review the correlations table, tolerance, and VIF values. As shown in Table 18, the results indicated no independent variables within the correlational table were greater than .7. Therefore, the predictor variables show no multicollinearity. As shown in Table 19, the variance inflation factor (VIF) test in SPSS measured the correlation between the independent variable of employee engagement and the three independent variables of time perspective. The VIF indicates “whether a predictor has a strong linear relationship with the other predictor” (Field, 2013, p.886). A low collinearity “tolerance value near zero indicates extreme multicollinearity” (George & Mallery, 2020, p. 220).

Table 18

*Correlations*

Variable	EE	PP	PH	Future
Employee Engagement	1.000	0.396	0.219	0.459
Past-Positive	0.396	1.000	0.153	0.283
Present-Hedonistic	0.219	0.153	1.000	-0.121
Future	0.459	0.283	-0.121	1.000

Table 19

*Variance Inflation Factors for Multicollinearity*

Variable	Tolerance	VIF
Past-Positive	.881	1.135
Present-Hedonistic	.944	1.059
Future	.887	1.127

Tolerance values were greater than 0.1, ranging from .881 to .944 (See Table 19).

The assessment of collinearity tolerance levels evidenced no multicollinearity. VIF

ranges were 1.059 to 1.135 and should not be > 10 (George & Mallery, 2020). Therefore, the tolerance levels and VIF values indicate meeting the assumption of multicollinearity.

In the data view of SPSS output, the data was sort in ascending order to examine outliers, high leverage points, and highly influential points. The assumption of outliers was addressed by no studentized residuals > ± 3.00 by reviewing casewise diagnostics. Additionally, studentized deleted residual in the SPSS data view did not indicate data points greater than ± 3. According to Huber (1981), high leverage points propose leverage values less than .2 as safe. A review of leverage values indicated no leverage value less than .2. Cook’s Distance test tested highly influential points. The value of Cook’s Distance had values < 1, hence, the assumption of no highly influential points was met (Cook, 1977; Laerd Statistics, 2015).

Table 20

*Model Summary*

<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>SE</i>	<i>F</i>	<i>p</i>
.583 <sup>a</sup>	0.339	0.324	0.40136	21.585	.000

*Note:*  $F(3,126) = 21.585, p < .001, R^2 = 0.34$

*Note:* *R* = correlation coefficient; *R*<sup>2</sup> = coefficient of determination;  $\Delta R^2$  = adjusted *R*<sup>2</sup>; *F* = *F* statistic; *SE* = standard error of the coefficient; *p* = significance.

Multiple regression tests whether the independent variables, past-positive, present-hedonistic, and future, predict employee engagement. The multiple regression model was statistically significant ( $R^2 = .34, F(3, 126) = 21.585, \rho < .001$ ). As shown in Table 20, *R*<sup>2</sup> indicated the predictor variables, past-positive, present-hedonistic, and future, explained approximately 34% of the variance in employee engagement. The adjusted *R*<sup>2</sup> takes into account the sample size variability and the number of independent variables. The adjusted *R*<sup>2</sup> indicated the predictor variables explained 32.4% of the

variance in employee engagement, adjusting for independent variables that are not statistically significant within the regression model (Brace et al., 2016; Huck, 2008). The three independent variables were statistically significant to the prediction of employee engagement,  $\rho < .05$  (See Table 21). As noted in Table 22, the independent variables, past-positive, present-hedonistic, and future orientations significantly predicted employee engagement,  $\beta = .24$ ,  $t(124) = 3.14$ ,  $\rho = .002$ ;  $\beta = .23$ ,  $t(124) = 3.32$ ,  $\rho = .002$ ;  $\beta = .42$ ,  $t(124) = 5.47$ ,  $\rho < .001$ , respectively.

Table 21

*ANOVA*

Model	SS	df	MS	F	p
Regression	9.635	3	3.477	21.585	.000
Residual	19.627	126	0.16		
Total	29.262	129			

*Note:* SS = Sum of Squares, df = degrees of freedom, MS = mean square, F = F statistic, p = significance.

Table 22

*Correlation Coefficients*

Model	B	SE	$\beta$	t	p
(Constant)	1.644	0.289		5.68	.000
Past-Positive	0.164	0.052	0.242	3.14	.002
Present-Hedonistic	0.133	0.042	0.233	3.132	.002
Future	0.319	0.058	0.419	5.469	.000

*Note:* B = unstandardized regression coefficient; SE = standard error of the coefficient;  $\beta$  = standardized coefficient; t = t-test; p = significance.

## Summary

The study's purpose was to determine the role of time perspective relative to employee engagement. This chapter presents statistical analysis beginning with pre-analysis data assessment of excluded responses, outliers, and participant criteria. The sample size consisted of 130 participants. Descriptive statistics of participants were analyzed for frequency of characteristics. Inferential statistical testing indicated normality assumptions were met. Cronbach's alpha reports each scale met the acceptable threshold. Assumptions associated with Pearson's correlation were tested and met the required outcomes. Research objectives two through six used Pearson's correlation coefficient to determine if a relationship exists between each subscale of time perspective and employee engagement. The findings indicated significant relationships between employee engagement and past-positive, present-hedonistic, and future time orientations. Past-negative and present-fatalistic did not have a significant relationship with employee engagement. Past-negative had an inverse relationship with employee engagement, indicating when past-negative increases, employee engagement decreases. Present-fatalistic did not significantly change the dependent variable of employee engagement.

Research objective seven used multiple regression analysis to determine the strength and association among subscales of time perspective and employee engagement. Assumptions associated with multiple regression analysis were tested and met the required outcomes. The predictor variables of time perspective explain 34% of the variance in employee engagement. Past-positive, present-hedonistic, and future had a significant relationship with employee engagement, with the future orientation having the most significant impact.



The next chapter presents associations between the statistical results and existing literature. In addition, the chapter offers conclusions and implications of findings, the study's limitations, and a discussion. Recommendations for future research and concluding remarks further address the study's findings.

## CHAPTER V – CONCLUSIONS

This chapter provides a discussion of data analysis results in Chapter IV. The chapter includes a summary of the study, the findings from statistical tests, conclusions, and theoretical implications and recommendations. Also, a discussion, the limitations of the study, and suggestions for future research are presented. The final section consists of concluding remarks.

### Summary of the Study

This study was designed to determine if a relationship exists between employee engagement and time perspective to examine Kahn's (1990, 1992) temporal dimension of engaging or withdrawing personal resources within the work environment. Eligibility to participate in this research consists of (a) individuals who met the criteria of employment in the United States, (b) work 35 hours or more per week, (c) 18 years of age or older, and (d) job tenure of one year or more. Additionally, demographic information of gender and industry was collected for reporting purposes. Data collection involved using an online survey through a data collection service, and 130 participants self-selected and completed the questionnaire. Using the guidelines from Creswell and Creswell (2018), inferential statistical tests were used to analyze the data, and the researcher drew inferences, conclusions, and assumptions about the population based on sample characteristics. The study utilized a correlational research design with a nonrandom, convenience, and purposive sampling strategy. The surveys employed in the study consisted of Shuck and Reio's (2017) Employee Engagement Scale (EES), Zhang, Howell, and Bowerman's (2013) fifteen-question version of the Zimbardo Time

Perspective Inventory (ZTPI-15), and a researcher-developed demographic questionnaire. The research variables included employee engagement and time perspective.

### Findings, Conclusions, and Implications

The literature review in Chapter II supports the findings from this study. Three findings from statistical testing are presented with associated inferences relative to the research objectives. Also included are the conclusions and implications of the findings.

The following findings address the study's research objectives relative to employee engagement and the role of time perspective.

#### *Finding 1.*

The degree employees focus on the present moment with a fatalistic perception has no significant relationship with employee engagement. The degree participants perceived past experiences as unfavorable lessened their inclination to engage in the work environment. A present-fatalistic focus contributes the least to employee engagement, and past-positive orientation diminishes employee engagement.

*Conclusion.* When employees focus on experiences in the present moment as fate, their psychological experiences do not positively influence how they perceive their work environment as they are accepting of circumstances. Their fatalistic interpretation forms a behavioral intention to take no action. A fatalistic perspective perceives experiences as unmalleable through their efforts. When employees focus negatively on past experiences, they unfavorably influence how they perceive their work environment. Their negative interpretation forms a behavioral intention to withdraw personal resources when participating in their organizational role.

Previous research supports this finding. Present-fatalistic perception consists of high levels of relatively adaptive and non-adaptive coping methods. Present-fatalistic perspectives choose extremely high emotional coping strategies in conflict situations, such as self-blaming, suppressing feelings, aggressiveness, and obedience (Bolotova & Hachaturova, 2013). They also choose non-adaptive behavioral coping strategies, such as "retreat and avoidance of conflict resolution" (p. 120). A present-fatalistic orientation utilizes a relatively low level of cognition in proportion to the very high emotional levels and extremely low behavioral levels. This orientation comprises no effective cognitive strategies (Bolotova & Hachaturova, 2013). Individuals with a present-fatalistic perspective focus on their feelings and believe that their future is predetermined with little thought that actions can influence the situation. In problematic or stressful conditions, employees think they are the problem or release their emotions on others. Rather than evaluating and solving a stressful situation, they rely on other people or accept the circumstance with little ability to make their own decisions. This orientation does not recognize the benefit of taking action, such as adapting or adjusting, in stressful situations. The fatalistic attitude leads to inflexible strategies which remain relatively absent of behavioral deviations. Thus, a present-fatalistic individual does not form behavioral intentions towards a goal or need (Bolotova & Hachaturova, 2013).

A past-negative perspective comprises the most substantial relationship with choosing maladaptive coping strategies (Bolotova & Hachaturova, 2013). Maladaptive coping strategies negatively impact mental health and well-being. Maladaptive methods prevent an individual's ability to mentally, emotionally, and behaviorally engage in stressful situations (Enns et al., 2018; Thompson et al., 2010). Research supports past-

negative orientation as a predictor of maladaptive coping behaviors such as alcohol and illicit abuse (Chavarría et al., 2015), gambling, lying, and stealing (Aylmer, 2017), internet and Facebook addiction (Przepiorka & Blachnio, 2016), and perceived stress (Papastamatelou et al., 2015). The consequences of focusing negatively on the past include increased stress and tension (Stolarski et al., 2013; van Beek et al., 2011), severe personality problems, suicidal ideation (Van Beek et al., 2011), and increased risk of mental and physical illness (P. Zimbardo & Boyd, 2008).

*Recommendations.* Since a high present-fatalistic orientation does not positively impact employee engagement, coaching, mentoring, and interventions designed for employees require tempering its impact (P. Zimbardo & Boyd, 1999, 2008). Present-fatalist orientation is negatively correlated with well-being and must be decreased (Boniwell et al., 2010). Tempering present-fatalistic intensity includes directing strategies to guide employees towards self-awareness. The methods involve (a) reducing passive activities, (b) developing autonomy, and (c) developing responsibility. These methods acknowledge the available options relative to purposeful choices and emphasize proactive rather than reactive behaviors (Boniwell et al., 2014; Boniwell & Osin, 2015; P. Zimbardo & Boyd, 1999, 2008). Additional steps include motivational interviewing. Boniwell and Osin (2015) provide a list of interview questions. For example, “what assumptions are you making?” or “why do you do this?” (p. 460).

Because a past-negative orientation negatively impacts employee engagement, coaching, mentoring, and interventions designed for an employee with a high past-negative focus require moderating its impact. Moderating past-negative intensity includes directing strategies to guide employees towards a past-positive emphasis (Boniwell &

Osin, 2015; P. Zimbardo & Boyd, 1999, 2008). Organizations should take steps to moderate the intensity of past-negative orientation for employees by taking actions such as (a) developing a positive portfolio to periodically review, (b) encourage employees to spend time with past-positive people and avoiding negative people, and (c) using expressive writing to help organize thoughts and emotions to find meaning (Boniwell & Osin, 2015; P. Zimbardo & Boyd, 2008). Boniwell and Osin (2015) and Fredrickson (2009) contain lists of evidence-based questions to pose while coaching and mentoring employees.

Engagement strategies that alleviate the negative consequences and examine systems and structures that promote opportunities to become more psychologically available at work are essential parts of any approach (Saks, 2006; Ferreira et al., 2018; Laba and Geldenhuys 2018, Turner, 2020). To personally engage in the work role, one does not sacrifice their authentic self and employs “coping functions of partial absences” when experiencing unfavorable situations (Kahn, 1992, p. 333). However, consistently withdrawing personal resources encourages employees to form intentions such as (a) leaving the company, (b) failing to perform at a high level, (c) failing to use organizational citizenship behaviors, and (d) failing to use discretionary effort (Shuck et al., 2018; Zigarmi & Nimon, 2011). Employees who want to quit may continue to stay and diminish their well-being, causing the company to “suffer from substandard work” (Wollard, 2011, p. 528). Organizations should address the high percentage of less than fully engaged workers' cognitive, emotional, behavioral, and physical needs as they have the most to gain (Ouweneel et al., 2013; Rastogi et al., 2018; Wollard, 2011). Shuck et al. (2018) proposes practitioners (a) create optimal work environments by fostering internal

motivation and (b) gain an understanding of the role of motivation in work. Organizations should focus on (a) meeting the basic psychological needs of autonomy, relatedness, and competence, (b) developing supportive managers, and (c) ensuring transparent communication strategies that occur regularly (Shuck et al., 2018; Zigarmi & Nimon, 2011).

*Finding 2.*

Past-positive, present-hedonistic, and future orientations have a relationship with employee engagement. The degree participants perceived past experiences as favorable moderately increased their inclination to engage in the work environment. The degree participants focused on the present moment for hedonistic reasons indicates a slight increase in one's inclination to engage at work. The degree one focused on the future showed a moderate rise in one's propensity to engage at work.

*Conclusion.* The findings indicate past-positive, present-hedonistic, and future-focused interpretations form a behavioral intention to engage personal resources towards organizational initiatives. When employees focus positively on their past psychological experiences, they are more likely to perceive their work environment favorably. When employees focus on hedonistic experiences in the present moment, their psychological experiences of pleasure and enjoyment have a small positive influence on favorable perceptions of their work environment. When employees focus on psychological experiences with a future perspective, the findings indicate that their future-focused interpretation forms a behavioral intention to engage personal resources in their organizational role.

Previous research supports that a high presence of past-positive, moderately high present-hedonistic, and relatively high future-time orientations are optimal (Boniwell & P. Zimbardo, 2004; Boyd & P. Zimbardo, 2005; Stolarski, 2016; P. Zimbardo & Boyd, 1999, 2008). The orientations correlate with an overall positive attitude (Alessandri et al., 2012; Boniwell et al., 2010; Bryant et al., 2005; Mello & Worrell, 2015; Sobol-Kwapinska, 2009; Sobol-Kwapinska & Jankowski, 2016; Zimbardo & Boyd, 2008; Zimbardo et al., 2012). Employees who report higher positive affect levels are more likely to be engaged (Hazelton, 2014; Macuka, 2018; Shuck, 2019). Employees who experience favorable affect draws from a broader range of behavioral responses (Bailey et al., 2017; Catalino & Fredrickson, 2011; Dunkley et al., 2014), and positive psychological resources motivate individuals to adapt to demands by outlining the circumstances more positively (Rabenu & Yaniv, 2017).

The cyclical psychological process of an employee becoming engaged involves adapting or adjusting to the environment through a proportionate use of cognitive and emotional energy informing behavioral intention to engage or withdraw personal resources at work (Christian et al. 2011; Kahn, 1990, 1992; Lewin, 1943; Nimon & Zigarmi, 2015; Saks & Gruman, 2014; Shuck & Reio, 2011; Shuck, Adelson, & Reio, 2017; Shuck, Osam, et al. 2017; Shuck, 2019). The past-positive orientation consists of moderate emotional and behavioral effort but less cognitive effort. Additionally, the past-positive direction indicates highly adaptive coping strategies and productive coping methods within the work environment (Bolotova & Hachaturova, 2013). Positively exhibiting a higher emotional intensity creates a willingness to invest emotionally toward a positive organizational role (Shuck, Adelson, & Reio, 2017). For employees with a



positive focus on the past, their time orientation emphasizes moments of intensely positive emotional experiences (Bolotova & Hachaturova, 2013). The strength of positive emotional efforts directs behavioral intentions in a direction that positively affects performance, business results, and well-being (Shuck & Reio, 2011). In stressful conditions, an individual's past-positive focus remains optimistic, through a belief they can manage the situation successfully (Zimbardo & Boyd, 1999, 2008).

Individuals with a present-hedonistic focus use moderately high behavioral and less cognitive and emotional intensity. The proportionate efforts indicate high adaptive, relatively adaptive, and low nonadaptive coping strategies that demonstrate somewhat productive handling of situations within the work environment (Bolotova & Hachaturova, 2013). A present-hedonistic direction focuses intensely on the present moment towards enjoyment and excitement with no future consequences, or non-adaptive emotional methods include avoiding the problem to evade the discomfort of an immediate situation (P. Zimbardo & Boyd, 1999, 2008). However, present-hedonistic orientation correlates with optimism, positive relationships with others, satisfaction with life, and positive moods (Stolarski et al., 2014) and chooses optimism as an adaptive coping tool in momentary situational challenges (Bolotova & Hachaturova, 2013).

Employees with a future orientation comprise extremely high cognitive, moderate behavioral, and little emotional intensity. The proportionate efforts consist of enormously high adaptive, little relatively adaptive, and minimal nonadaptive coping strategies that demonstrate very productive managing of situations within the work environment (Bolotova & Hachaturova, 2013). These individuals choose coping self-control strategies

to solve problems, which sometimes requires withdrawing for a short time to determine a rational behavior response (P. Zimbardo & Boyd, 1999, 2008; P. Zimbardo et al., 2012).

*Recommendations.* Coaching, mentoring, and interventions designed for an employee with a past-positive orientation should consider an extremely high level of positive emotions makes it difficult to detach from problems requiring changes or reactions (Oishi et al., 2009). Additionally, this orientation may suppress employee emotions rather than reconstructing negative perceptions, thus decreasing authenticity (Gross & John, 2003; P. Zimbardo & Boyd, 2008). Past-positive views in the excess keep employees stuck in the past, basing their decisions and actions on memories rather than the present experience. They prefer not to leave the comfort and sense of security provided by a positive past focus (P. Zimbardo, Clements, & Leite, 2017).

The engagement literature cautions being overly engaged relative to extreme levels as this can be detrimental and leads to emotional exhaustion, work-life imbalance, workaholism and may lead to burnout (George, 2011; Imperatori, 2017; Korner et al., 2012; Macey & Schneider, 2008; Moeller et al., 2018; Purcell, 2014; Schaufeli et al., 2008; Van Beek et al., 2012; Welbourne, 2011). Organizations should emphasize to employees to avoid being overly engaged by (a) ensuring work hours are reasonable along with breaks, (b) encouraging taking vacation time, and (c) providing a safe environment for employees to use their voice to maintain their authentic self (e.g., Imperatori, 2017; Shuck, 2019).

Being engaged includes thoughts of the past and future in assessing the current situation (Kahn, 1990, 1992; Shuck, 2019). Coaching, mentoring, and interventions designed for employees with very high present-hedonistic orientation focus on the

present underutilizing the past and future aspects. Strategies for organizations to emphasize consist of moderating the present level of intensity with holistic presence. Holistic presence requires understanding in the present moment the connection of the past thoughts and future expectations and how they contribute to the current situational moment (Boniwell & Osin, 2015; P. Zimbardo & Boyd, 2008). Additionally, coaching and feedback tips include intervention practices for the employee such as (a) delaying gratification, (b) building future visions by marking future dates in an easily seen as a daily reminder, (c) making a list of personal goals, and (d) reducing the overcrowded present by only choosing the most meaningful and enjoyable things (Boniwell & Osin, 2015; Kazakina & van Beek, 2017; P. Zimbardo et al., 2012; P. Zimbardo & Boyd, 2008).

Although a future-focused orientation impacts employee engagement more positively than other orientations, employees may overuse their future perspective. Coaching, mentoring, and interventions designed for an employee who overuses a future focus require moderating its impact (Boniwell et al., 2015; P. Zimbardo & Boyd, 1999, 2008). Moderating future intensity includes directing strategies to guide employees towards the present moment (Boniwell & Osin, 2015; P. Zimbardo & Boyd, 1999). Organizations should moderate the intensity of future time orientation for employees by taking actions such as (a) ensuring the employee understands the connection of future expectations that contribute to the perception of the current situational moment (P. Zimbardo & Boyd, 2008), (b) clarifying life priorities and personal goals, and (c) prioritizing self-regulation, (d) doing less by discarding items at the end of the to-do list, (e) lessening obligations and commitments, (f) making conscious choices of what gets

done, and (g) practicing saying no (Boniwell et al., 2014; Boniwell et al., 2015, P. Zimbardo & Boyd, 2008)

*Finding 3.*

Past-positive, present-hedonistic, and future orientations predict employee engagement. Future time orientation contributes the strongest impact in predicting employee engagement. The second strongest impact contributing to the prediction of employee engagement is the past-positive orientation followed by present-hedonistic.

*Conclusion.* Employees are motivated to engage in their organizational role when they focus positively on the past, concentrate on future goals and needs, and meet their present hedonistic needs. Thus, the findings indicate that an employee's interpretive focus on the future, positive memories of the past, and present-hedonist desires are more likely to form behavioral intentions to engage personal resources towards organizational initiatives.

Previous research supports the finding. Studies on time perspective show life experience predominantly “affects one’s ability to cognize, derive motivation, or be emotionally affected by a particular time frame” (Lasane & O’Donnell, 2015, p. 13). The strength in each orientation influences the overall time perspective (P. Zimbardo & Boyd, 1999). For example, future orientation can lessen the non-adaptive present-hedonistic coping methods; therefore, maintaining healthy present-hedonist behaviors (Stolarski, Fioulaine, & Van Beek, 2015). Another example is that a very high future orientation hinders experiencing the present moment as they consider it a waste of time. Balancing time perspectives according to situational moments is optimal in adapting and adjusting to the workplace and individual success (Boyd, & P. Zimbardo, 2008).

An optimal time perspective consists of low scores on the past-negative and present-fatalistic and moderate to high scores on the past-positive, present-hedonistic, and future-time perspectives scale (Boniwell & P. Zimbardo, 2004; Boyd & P. Zimbardo, 2005; Stolarski, 2016; P. Zimbardo & Boyd, 1999, 2008) and correlates with an overall positive attitude (Alessandri et al., 2012; Boniwell et al., 2010; Bryant et al., 2005; Mello & Worrell, 2015; Sobol-Kwapinska, 2009; Sobol-Kwapinska & Jankowski, 2016; Zimbardo & Boyd, 2008; Zimbardo et al., 2012). Other time perspective research of temporal profiles on the interrelatedness between the orientations supports this study's findings. The optimal time perspective consists of low scores on the maladaptive orientations of past-negative and present-fatalistic, high scores on the more adaptable orientations of past-positive and future, and moderate level on present-hedonistic (Boniwell, 2010; Drake et al., 2008; Sircova & Mitina, 2008; van Beek et al., 2011; P. Zimbardo & Boyd, 2008; P. Zimbardo et al., 2012).

Engagement research supports employee engagement as a positive psychological state using proportionate cognitive, emotional, and behavioral aspects in psychologically adapting and adjusting to cope with perceptions of internal and external conditions. The employee's goal is to stay as close to their authentic self as possible within the organizational environment to maintain well-being (Kahn, 1990, 1992; Shuck 2019). Bolotova and Hachturova's (2013) study indicated the proportionate use of cognitive, emotional, and behavioral intensity determined one's choice of coping strategies. Past-positive, present-hedonistic, and future orientations predict employee engagement. Research supports that each orientation comprises highly adaptive and relatively adaptive

coping strategies' for cognitive, emotional, and behavioral choices (Bolotova & Hachaturova, 2013).

*Recommendations.* Organizations cannot rely on external strategies alone without including the unconscious subjective experiences of employees (Eldor et al., 2017; George, 2009; Morgan, 2017; Shuck, Adelson, & Reio, 2017). As a subjective experience, employee engagement does not physically manifest as behavior but psychologically forms as an intention to take action in a specific direction towards meeting needs and goal attainment (Shuck, Adelson, & Reio, 2017; Shuck & Wollard, 2010).

Employee engagement is grounded in positive psychology (Bailey et al., 2015, Kahn, 1990). The design of positive psychological interventions promotes positive emotions, behaviors, or thoughts to enhance well-being and positive development (Catalino et al., 2014; Layous et al., 2014; Parks & Biswas-Diener, 2013). The purpose of time perspective interventions is to pursue positive functioning (Boniwell & Zimbardo, 2004).

Human capital interventions provide knowledge through training and are critical in stimulating positive behavior in individuals (Otoo, 2019). However, to deliver the benefits of an engaged workforce, it needs to be explicitly integrated by immersion and embedding employee engagement throughout the organization (Guest, 2014). Systematic awareness and purposeful attention to the psychological concept of the past, present, and future can create an immersion throughout the organization for employees, managers, and leaders (Kazakina & Van Beek, 2017).

Prior research suggests strategies that inform practice (Boniwell et al., 2014; Shuck, 2019). Employee engagement relates to the individual need whereby individual differences play a significant role in determining an employee's potential level of engagement. Thus, the psychology of the individual is a critical consideration. Suggested strategies from prior research (Bolier et al., 2013; Boniwell et al., 2014; Boniwell and Osin, 2015; Ghosh et al., 2019; Kazakina & van Beek, 2017; Saks, 2017; Turner, 2020) suggest managerial leaders should implement taking actions such as (a) introducing time perspective to the employee, (b) advising the employee of the free time perspective survey available on the Time Paradox website, (c) discussing the results with the employee allowing them to evaluate and interpret the findings themselves, (d) identifying the employee's profile to initiate further coaching, mentoring, or training, (d) promoting the need for self-awareness of employee time perspective, (e) pointing to the employee's future through career mapping and pathing, (f) preparing leaders and managers to have empowered and future-focused one-on-one conversations, (g) taking time to listen and talk with employees throughout the organization, (h) elevating learning and development strategies for all levels of employees, (i) placing emphasis on well-being and the acknowledgment of the manager's role as critical to success, (j) meeting the needs of employees and the organization, (k) raising awareness of their time perspective and understanding strategies to coach or mentor relative to one's own time perspective and the employee's time perspective, and (l) ensuring interventions are repeated many times over a sustained period.

## Discussion

This study's framework consists of human capital, field, time perspective, and employee engagement theories. The findings indicate implications relative to the theoretical approaches. The engagement literature generally addresses personal engagement and disengagement as separate constructs. However, Kahn's (1990) seminal engagement study describes an individual's behavior as a mixture of both. Additionally, Wollard (2011) proposed that research examine employee engagement as a range of fully engaged and temporarily disengaged.

This research aligns with the idea that employee engagement consists of a mixture of employees engaging and disengaging from their work role to protect and defend their authentic selves. Kahn (1992) describes the process of engaging or disengaging in a situational context as having a temporal dimension. This research indicates that the temporal dimension of an individual's time perspective predicts engaging or withdrawing personal resources, explains how the psychological process of becoming engaged occurs, and its practical applications.

## Limitations of the Study

Limitations clarify the scope of the research project and include certain aspects of the study that may negatively affect the ability to generalize the results to the sample population and remain out of the control of the researcher, such as limitations reflected in the methodology, sample, and responses (Roberts, 2010). Three limitations exist for this study. First, the correlational methods used in this study examines the relationship between employee engagement and time perspective. According to Stangor (2015) and



Jhangiani et al. (2019), the findings of a correlational study indicate a relationship but do not confirm causality. The research did not investigate alternative explanations, such as economic conditions, organizational restructuring, or an individual's promotions relative to career paths within the company. The non-experimental, cross-sectional, correlational design, where data collection occurred at a single point in time, provided only a static picture and could not explain a causal relationship (Stangor, 2015).

Second, the study's use of purposive sampling and the participants' self-selection limits the results' generalizability to other situations or the entire population. The purposive sampling technique involves selecting participants for the sole purpose of a participant's qualities. Individuals who met the eligibility requirements and did not participate may have different responses than those who participated in the survey (Etikan et al., 2016). Additionally, the subjective measures of self-selection may limit generalizing findings to the sample population. Volunteering to participate in the study perpetuates the possibility of selection bias. Unlike conventional samples, researchers cannot randomly select from the target population while using MTurk, thus posing a threat to external validity (Cheung et al., 2017; Clifford & Jerit, 2014).

Third, the participants were anonymous and prevented the researcher's ability to verify eligibility. The online survey required participants to answer eligibility questions, and the researcher relied on their honesty. Anonymous surveys intend to increase honesty but remain a limitation when using online surveys (Shadish et al. 2002).

#### Recommendations for Future Research

Shuck et al. (2017) point out that engagement literature contains mixed evidence of gender differences in how men and women experience their work differently and the

working context. Time perspective research indicates over time, people's perspectives can change. Future research between employee engagement and time perspective should include gender and the various age groups in order to compare over time.

Research recommends there is an under-reliance on qualitative studies and so much of the documented research is primarily survey-based (Bailey et al., 2017; Shuck, 2019). Because employee engagement involves how employees think, feel, and intend to behave, a mixed-methods approach would capture an employee's comprehensive employee engagement experience. Additionally, since becoming engaged and time perspectives are not a static process, longitudinal studies should be conducted to capture the ebbs and flow of fluctuations relative to engaging and withdrawing personal resources relative to employees' time perspectives.

#### Concluding Remarks

The purpose of this study was to determine if a relationship existed between employee engagement and time perspective. The data collection from 130 MTurk participants consists of those who work in the United States, work 35 hours or more per week, and have been in their current position for one year or more. The research surveys include the Employee Engagement Scale (EES) and the shortened 15-question Zimbardo Time Perspective Inventory (ZTPI-15). The correlational analysis of the time orientations revealed that future, past-positive, and present-hedonistic positively correlate with employee engagement. Present-fatalistic had no relationship with employee engagement, and past-negative focus diminishes employee engagement. The multiple regression analysis indicated predictor variables of past-positive, present-hedonistic, and future orientations explained 34% of the variance in employee engagement.

This study focuses on the human capital psychological perspective that prioritizes internal resources in explaining individual outcomes rather than the environment. The study examines an individual's time perspective's role in defining how an individual's perception of the work setting forms and shapes behavioral intention to take positive actions within their work role. Time perspective influences employees' perceptions of the work environment as a personal resource, thus providing vital information when developing employee engagement initiatives. Although additional research is necessary, the study provides practical applications to understand and direct one's time perspective to reflect a more positive and flexible outlook to influence employee engagement. Leaders who desire an engaged workforce should embed engagement strategies that consider the subjective aspects of an individual's time perspective.

## APPENDIX A - IRB Approval Letter

5/29/2021

Mail - Donna Valestro - Outlook

### IRB-21-235 - Initial: Sacco Committee Letter - Expedited and Full

do-not-reply@cayuse.com <do-not-reply@cayuse.com>

Thu 5/27/2021 8:30 AM

To: Donna Valestro <Donna.Valestro@usm.edu>; Heather Annulis <Heather.Annulis@usm.edu>; Sue Fayard <Sue.Fayard@usm.edu>; Michael Howell <Michael.Howell@usm.edu>; Jonathan Snyder <Jonathan.Snyder@usm.edu>

Office of  
Research Integrity



118 COLLEGE DRIVE #5125 • HATTIESBURG, MS | 601.266.6576 | USM.EDU/ORI

#### NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-21-235

PROJECT TITLE: Employee Engagement and the Role of Time Perspective

SCHOOL/PROGRAM: School of IAPD, Human Capital Development

RESEARCHER(S): Donna Valestro, Heather Annulis

IRB COMMITTEE ACTION: Approved

CATEGORY: Expedited

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

PERIOD OF APPROVAL: May 27, 2021

A handwritten signature in cursive script that reads "Donald Sacco".

**Donald Sacco, Ph.D.**  
Institutional Review Board Chairperson

<https://outlook.office.com/mail/deeplink?popoutv2=1&version=20210524004.15>

1/1

## APPENDIX B - Qualtrics Survey Instrument

5/30/2021

Qualtrics Survey Software

### Time Perspective and Employee Engagement

.

#### **Purpose:**

The purpose of this study is to examine how individuals think and feel about their work environment and respond to specific behaviors. The study is being conducted by Donna Valestro, a doctoral candidate in Human Capital Development at The University of Southern Mississippi, in partial fulfillment of her requirements for the degree of Doctor of Philosophy. This research is performed under the guidance of Dr. Heather M. Annulis, The University of Southern Mississippi.

#### **. Description of Study:**

Eligibility criteria for HITs involves working in the United States, 18 years or older, work 35 hours or more per week and been in your current job one year or more. If you meet the criteria, you will be asked to complete a questionnaire about how you think and feel about your work environment and how you respond to specific behaviors. The survey will take less than 10 minutes to complete. The study findings may be used for employee engagement initiatives, providing information regarding employee attitudes, perceptions, and behaviors. This study contains a number of checks to make sure participants are finishing the the tasks honestly and completely. As long as you read the instructions and complete the tasks, your HIT will be approved. If you fail these checks, your HIT will be rejected. Upon completion of the survey, a compensation code will appear to enter into the MTurk HIT to cue payment. The Qualtrics instrument will be linked to MTurk. MTurk participants completing the survey, HIT, will receive monetary compensation of \$1.25 within 72 hours of HIT assignment completion (if you withdraw there will be no monetary compensation).

.

#### **.. Benefits:**

The survey method provides generalizable information on a variety of aspects of the human condition.

[https://usmep.co1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV\\_cYHmyc3jtzDaq0u&ContextLibraryID=U...](https://usmep.co1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_cYHmyc3jtzDaq0u&ContextLibraryID=U...) 1/12

Participation in this survey offers an opportunity to contribute to ongoing research in advancing aspects of the human experience within the work environment.

**. Risks:**

This survey poses no known personal risks. You may choose or not choose to answer a question, for whatever reason, and you may withdraw at any time by closing your browser. By continuing with participation, you are indicating you are at least 18 years of age.

**. Confidentiality:**

To ensure confidentiality, this study use an external link to MTurk, therefore no data is available to Amazon MTurk. The survey will not ask for personally identifiable information or MTurk Worker IDs, or collect IP addresses. The compensation code at the end of the survey is the same for everyone to avoid a unique identifying link to survey responses. Informed consent does not require your name. Your participation is voluntary and refusal to participate will result in no penalty or adverse consequences.

**. Participant's Assurance:**

This project and this consent form have been reviewed by the Institutional review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional review Board. The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

Any questions about this research project should be directed to the Principal Investigator using the contact information provided above.

**. CONSENT TO PARTICIPATE IN RESEARCH:**

I understand that participation in this project is completely voluntary, and I may withdraw at any time without penalty, prejudice, or loss of benefits. Unless described above, all personal information will be kept strictly confidential, including my name and other identifying information. All procedures to be followed and their purposes were explained to me. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. Any new information that develops during the

[https://usmep.co1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV\\_cYHmyc3jtzDaq0u&ContextLibraryID=U...](https://usmep.co1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_cYHmyc3jtzDaq0u&ContextLibraryID=U...) 2/12

project will be provided to me if that information may affect my willingness to continue participation in the project.

By clicking the "Yes, I consent" box below, I give my consent to participate in this research project. Check this box if you consent to this study, and then click the arrow at the bottom right of the screen to proceed. If you do not wish to consent to this study, please click the "No, I do not consent" box and close your browser.

- Yes, I consent.
- No, I do not consent.

Q1. To what age group do you belong?

- 18-20
- 21-25
- 26-35
- 36-45
- 46-55
- Over 55

Q2. How long have you been in your current job?

- less than one year
- 1-3 years
- 4-5 years
- 6-10 years
- more than 10 years

3. What is your gender?

- Male
- Female
- Prefer not to answer

**Q4.** In what Industry do you work?

- Financial Activities
- Manufacturing
- Services Industry
- Professional and Business Services
- Educational
- Healthcare
- Not listed

**Q5-Q17.** Please answer the following by indicating the extent you disagree or agree.

**Q5.** I am really focused when I am working.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q6.** I concentrate on my job when I am at work.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q7.** I give my job responsibility a lot of attention.



- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Q8. At work, I am focused on my job.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Q9. Working at my current organization has a great deal of personal meaning to me.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Q10. I feel a strong sense of belonging to my job.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Q11. I believe in the mission and purpose of my company.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q12.** I care about the future of my company.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q13.** Do not answer this question if you are paying attention.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q14.** I really push myself to work beyond what is expected of me.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q15.** I am willing to put in extra effort without being asked.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q16.** I often go above what is expected of me to help my team be successful.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q17.** I work harder than expected to help my company be successful.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**Q18-Q33.** Read each item and answer the question: "How characteristic or true is this of you?" Check the appropriate answer.

**Q18.** I think about the bad things that have happened to me in the past.

- Very Untrue
- Untrue
- Neutral
- True

Very True

**Q19.** Painful past experiences keep being replayed in my mind.

Very Untrue

Untrue

Neutral

True

Very True

**Q20.** It's hard for me to forget unpleasant images of my youth.

Very Untrue

Untrue

Neutral

True

Very True

**Q21.** Familiar childhood sights, sounds, and smells often bring back a flood of wonderful memories.

Very Untrue

Untrue

Neutral

True

Very True

**Q22.** Happy memories of good times spring readily to mind.

Very Untrue

Untrue

- Neutral
- True
- Very True

**Q23.** What is your favorite ice cream?

**Q24.** I enjoy stories about how things used to be in the "good old times."

- Very Untrue
- Untrue
- Neutral
- True
- Very True

**Q25.** Life today is too complicated; I would prefer the simpler life of the past.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

**Q26.** Since whatever will be will be, it doesn't really matter what I do.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

Q27. Often luck pays off better than hard work.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

Q28. I make decisions on the spur of the moment.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

Q29. Taking risks keeps my life from becoming boring.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

Q30. It is important to put excitement in my life.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

**Q31.** When I want to achieve something, I set goals and consider specific means of reaching those goals.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

**Q32.** Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

**Q33.** I complete projects on time by making steady progress.

- Very Untrue
- Untrue
- Neutral
- True
- Very True

Powered by Qualtrics

## Employee Engagement Scale

*EES; Work Appraisal; Employee Engagement*

Reference: 16091 / Category: Health Index

UNIVERSITY OF  
**LOUISVILLE**

### Highlights

- First psychometrically reliable and valid scale of employee engagement from an agreed upon definition and framework
- Broader implications than previous tests that measure engagement such as the Job Engagement Scale and the Utrecht Work Engagement Scale.

### Inventors

- Dr. Brad Shuck (UofL)
- Dr. Thomas Reio (FIU)

### Current Status

- **IP Status:** Pending U.S. Copyright
- **Development Status:** Preliminary testing completed
- **Fields of Use Available:** All
- **Publications:** Shuck, Brad, et al. "Employee Perceptions of the Work Environment, Motivational Outlooks, and Employee Work Intentions: An HR Practitioner's Dream or Nightmare?" *Advances in Developing Human Resources*, 2018, doi: 10.1177/1523422318757209.

### Technology

There is a growing body of research into how the psychological state of employees impacts organizational productivity.

There are, however, no assessment tools that reliably test for work, job, organizational, and intellectual engagement.

To fill this critical organizational need, researchers at the University of Louisville and Florida International University have developed *The Employee Engagement Scale*.

Through a series of questions aimed at understanding an employee's most direct experience of their work, employee engagement is measured, which serves as an indicator for overall organizational health and productivity.

By applying just a few behaviorally-based questions measuring an employee's emotional, behavioral, and cognitive engagement, a percentage can be determined that shows how satisfied and engaged employees feel. If percentages are low, employers can alter business models or introduce key programs that drive engagement, which is likely to lead to increased productivity and higher levels of retention. The EES provides an insightful snapshot of how employee's feel about their place of work, which has numerous applications for leaders and organizations.

#### Advantages and Applications:

- Easy to deploy online at a participant's convenience;
- Proxy measure of organizational health, such as psychological environment;
- Scale for measuring employee engagement which is directly linked to productivity.

MORE INFORMATION: [thinker@louisville.edu](mailto:thinker@louisville.edu) / 502.852.2965 / Attn: 16091



Employee Engagement Scale (EES)

(CE = Cognitive Engagement EE= Emotional Engagement BE = Behavioral Engagement)

- CE1. I am really focused when I am working.
- CE2. I concentrate on my job when I am at work.
- CE3. I give my job responsibility a lot of attention.
- CE4. At work, I am focused on my job.
- EE1. Working at my current organization has a great deal of personal meaning to me.
- EE2. I feel a strong sense of belonging to my job.
- EE3. I believe in the mission and purpose of my company.
- EE4. I care about the future of my company.
- BE1. I really push myself to work beyond what is expected of me.
- BE2. I am willing to put in extra effort without being asked.
- BE3. I often go above what is expected of me to help my team be successful.
- BE4. I work harder than expected to help my company be successful.

Measured on a 5 point Likert scale, where 1 = strongly disagree and 5 = strongly agree

**From:** Donna Valestro <Donna.Valestro@usm.edu>

**Date:** Thursday, March 18, 2021 at 9:38 PM

**To:** Shuck,Brad <brad.shuck@louisville.edu>

**Subject:** Employee Engagement Scale

**CAUTION:** This email originated from outside of our organization. Do not click links, open attachments, or respond unless you recognize the sender's email address and know the contents are safe.

Hi Dr. Shuck,

Previously you provided me with the EES to use for my dissertation. I am finally at the stage of my proposal and have a question! 😊

Are there any specific instructions on how the instrument is scored?

I understand the EES has 12 questions using a 5-point scale strongly disagree to strongly agree. My thoughts after reading your paper *The Employee Engagement Scale: Initial Evidence for Construct Validity and Implications for Theory and Practice*, were to assign numbers 1 through five, sum each item (cognitive, emotional, behavioral) and divide each summed item by 4 (four questions).

I am on the fast track at this point and thought I should touch base with you for your expertise. Any feedback is greatly appreciated. Thank you so much for your time and attention.

Best Regards,  
Donna

Donna Valestro  
Ph.D. Candidate  
Department of Human Capital Development  
donna.valestro@usm.edu

#### Re: Employee Engagement Scale

**Sent:** Friday, March 19, 2021 7:15 AM

**To:** Donna Valestro <Donna.Valestro@usm.edu>

**Subject:** Re: Employee Engagement Scale

Donna –

Good morning – I hope you are well. Yes, what you have listed would be the preferred way to score and use the EES. Sometimes, also, we just use the full scale (so all 12 questions, divided by 12).

Good luck to you and keep me posted on your work and research!

Brad

Dr. Brad Shuck  
Associate Professor  
2021 Rechter Fellow in Positive Leadership  
Program Director, Human Resources & Organizational Development  
Commonwealth Scholar, Commonwealth Institute of Kentucky  
Associate Editor, *New Horizon's in Adult Education and Human Resource Development*  
Educational Leadership, Evaluation, and Organizational Development  
College of Education & Human Development  
University of Louisville  
Louisville | Kentucky | 40292  
502.852.7396 (p)

[brad.shuck@louisville.edu](mailto:brad.shuck@louisville.edu) (e)

@drbshuck | [YouTube](#) | [LinkedIn](#) | [Twitter](#) | [Instagram](#) | Clubhouse

**From:** Donna Valestro <Donna.Valestro@usm.edu>  
**Date:** Monday, April 19, 2021 at 10:58 AM  
**To:** Shuck,Brad <brad.shuck@louisville.edu>  
**Subject:** Employee engagement scale

**CAUTION:** This email originated from outside of our organization. Do not click links, open attachments, or respond unless you recognize the sender's email address and know the contents are safe.  
Brad,

Good morning. My proposal defense is May 12th. 😊

I had a question about the use of the EES. What are your thoughts about the measurement the scale as ordinal vs interval? I only ask because, as I am sure you know, the literature has various opinions. The information and research support exists for both. My research design is a correlational study to determine if a relationship exists between employee engagement and time perspective.

Would appreciate just a quick thought.

Thank you.

Donna Valestro  
Ph.D. Candidate  
Department of Human Capital Development  
donna.valestro@usm.edu

**Re: Employee engagement scale**

**Subject:** Re: Employee engagement scale

Hi Donna –

Good morning and great to hear from you –

I would use the data as interval, only because the scale attempts to determine the differences of value within two consecutive values when it comes to engagement. So, there is a true, or real difference between a 2 and a 3, whereas if we used ordinal, we would only be concerned with the order and ranking of the data.

Hope that helps and good luck!! I know you will do amazing!  
Brad

Dr. Brad Shuck  
Associate Professor  
2021 Rechter Fellow in Positive Leadership  
Program Director, Human Resources & Organizational Development  
Commonwealth Scholar, Commonwealth Institute of Kentucky  
Associate Editor, New Horizon's in Adult Education and Human Resource Development  
Educational Leadership, Evaluation, and Organizational Development  
College of Education & Human Development  
University of Louisville  
Louisville | Kentucky | 40292  
502.852.7396 (p)  
[brad.shuck@louisville.edu](mailto:brad.shuck@louisville.edu) (e)  
[@drbshuck](#) | [YouTube](#) | [LinkedIn](#) | [Twitter](#) | [Instagram](#) | [Clubhouse](#)

## APPENDIX D - ZTPI-15 Instrument

### ZIMBARDO TIME PERSPECTIVE INVENTORY (ZTPI)

#### SHORT FORM\*

Read each item and, as honestly as you can, answer the question: "How characteristic or true is this of me?" Please answer all of the following questions. Use the scale below.

From 1 (Very Untrue) to 5 (Very True)

1. I think about the bad things that have happened to me in the past
2. Painful past experiences keep being replayed in my mind
3. It's hard for me to forget unpleasant images of my youth
4. Familiar childhood sights, sounds, smells often bring back a flood of wonderful memories
5. Happy memories of good times spring readily to mind
6. I enjoy stories about how things used to be in the "good old times"
7. Life today is too complicated; I would prefer the simpler life of the past.
8. Since whatever will be will be, it doesn't really matter what I do
9. Often luck pays off better than hard work
10. I make decisions on the spur of the moment
11. Taking risks keeps my life from becoming boring
12. It is important to put excitement in my life
13. When I want to achieve something, I set goals and consider specific means for reaching those goals
14. Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play
15. I complete projects on time by making steady progress

Past negative: 1, 2, 3; Past positive: 4, 5, 6; Present fatalism: 7,

8, 9; Present hedonism: 10, 11, 12; Future: 13, 14, 15.

*\*Ryan T. Howell, Ph.D., Associate Professor, Psychology Department, San Francisco State University; Co-founder, Beyond the Purchase.*

## APPENDIX E - Permission to Use EES

Hi Dr. Shuck,

I am writing to request permission to use the Employee Engagement Scale (EES) as part of my dissertation. My topic is the role of time perspective in employee engagement. If granted permission, please let me know how to obtain the document.

Thank you so much. Any assistance you may provide is greatly appreciated!

Best regards,

Donna Valestro  
PhD Candidate  
Department of Human Capital Development  
donna.valestro@usm.edu

**From:** Shuck,Brad <brad.shuck@louisville.edu>  
**Sent:** Monday, October 29, 2018 3:00 PM  
**To:** Donna Valestro  
**Subject:** Re: Permission to use EES

Hi Donna -  
Good afternoon - it is great to hear from you. You have my permission to use the EES. If I can do anything for you in support of your work, please let me know.

I am not sure what document you might need but let me know and I will get it to you. I wish you the very best with your research.

My best -  
Brad

---

Dr. Brad Shuck  
Associate Professor  
Program Director, M.S. Human Resources and Organizational Development  
Program Director, Health Professions Education Graduate Certificate  
Commonwealth Scholar, Commonwealth Institute of Kentucky  
Associate Editor, New Horizons in Adult Education and Human Resource Development  
Educational Leadership, Evaluation, and Organizational Development  
College of Education & Human Development  
University of Louisville  
Louisville | Kentucky | 40292  
502.852.7396 (p)  
brad.shuck@louisville.edu (e)  
@drbshuck (twtr)

## APPENDIX F - Permission to Use ZTPI-15

On Mon, May 21, 2018 at 3:14 AM, Squarespace < - [uarespace.info](mailto:uarespace.info)> wrote:

**Name:** donna valestro

**Email Address:** [donna.valestro@usm.edu](mailto:donna.valestro@usm.edu)

**Subject:** ZTPI short form

**Message:** I am a PhD candidate using Time Perspective in my dissertation. Would you be able to direct me in how to obtain and request permission to use the ZTPI short form? I appreciate any help you may provide.

(Sent via [AETAS](#))

[Reply](#)   [Forward](#)

Re: Form Submission - New Form - ZTPI short form

**Sent:** Wednesday, May 23, 2018 2:44:41 PM

**To:** Donna Valestro

**Subject:** Re: Form Submission - New Form - ZTPI short form

Hi Donna,

What exciting news!

Attached is the ZTPI short form as well as the ZTPI scoring graph. You have permission to use the ZTPI short or long forms for use in your dissertation as well as other research and/or clinical practice.

A favor: at some future date, should you choose to incorporate TPT in your clinical practice, please let us know. We receive requests from people seeking TPT therapists on a regular basis. It would be wonderful to refer them to you if they are in your area.

All the best with your dissertation.

Rose

Rosemary KM Sword

Time Perspective Therapy, Codeveloper; [timeperspectivetherapy.org](http://timeperspectivetherapy.org)

The Time Cure, Coauthor; [thetimecure.com](http://thetimecure.com)

Living and Loving Better, Coauthor; [livingandlovingbetter.com](http://livingandlovingbetter.com)

Aetas Mind Balancing Apps, Developer; [discoveraetas.com](http://discoveraetas.com)

[PsychologyToday.com](http://PsychologyToday.com), Contributor; search: Rosemary Sword

[Happify.com](http://Happify.com), [AppealPower.com](http://AppealPower.com), and

FMP Polish Journal - Psychology in Practice, Contributor

## REFERENCES

- Appelbaum, M. C.-W. (2018). Journal article reporting standards for quantitative research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 3-25.  
<http://doi.org/10.1037/amp0000191>
- Aguinas, H., Villamar, I., & Ramami, R. S. (2021). MTurk research: Review and recommendations. *Journal of Management*, 47(4), 823-837.  
<https://doi.org/10.1177/0149206320969787>
- Airila, A., Hakanen, J. J., Schaufelo, W. B., Punakallio, A., & Lusa, S. (2014). Are job and personal resources associated with work ability 10 years later? The mediating role of work engagement. *World & Stress*, 28(1), 87-105.  
<https://doi.org/10.1080/02678373.2013.872208>
- Alan, K. (2016). Wilhelm Maximilian Wundt. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University.  
<https://plato.stanford.edu/entries/wilhelm-wundt/#WundIndiPsyc>
- Albrecht, S. L. (2010). Employee engagement: Key questions. In S. L. Albrecht (Ed.), *Handbook of employee engagement: Perspectives, issues, research and practice* (pp. 3-19). Edward Elgar Publishing Limited.
- Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance*, 2(1), 7-35. <https://doi.org/10.1108/joep-08-2014-0042>

- Albrecht, S., Bredahl, E., & Marty, A. (2018). Organizational resources, organizational engagement climate, and employee engagement. *The Career Development International*, 23(1), 67-85. <https://doi.org/10.1108/cdi-04-2017-0064>
- AlleyDog.com. (n.d.). *Subjective experience*. <https://www.alleydog.com/glossary/cite-my-term.php?term=Subjective+Experience>
- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine*, 18(3), 91-93. <https://doi.org/10.1016/j.tjem.2018.08.001>
- American Psychological Association. (2018, October 30). *Stress in America: Stress and gen z*. <https://www.apa.org/news/press/releases/stress/2018/stress-gen-z.pdf>
- American Psychological Association. (2020, September 10). *Stress in the workplace*. <https://www.apa.org/topics/workplace-stress>
- Anderson, D. R., Sweeney, D. J., & Williams, T. A. (2011). *Statistics for business and economics*. Cengage Learning.
- Andre, L., van Vianen, A. E., Peetsma, T. T., & Oort, F. J. (2018). Motivational power of future time perspective: Meta-analysis in education, work, and health. *PLOS One*, 13(1), e0190492. <https://doi.org/10.1371/journal.pone.0190492>
- Anthony-McMann, P. E., Ellinger, A. D., Astakhova, M., & Halbesleben, J. R. (2017). Exploring different operationalizations of employee engagement and their relationships with workplace stress and burnout. *Human Resource Development Quarterly*, 28(2), 163-195. <https://doi.org/10.1002/hrdq.21276>
- Aon. (2018). *2018 Trends in global engagement*. [http://images.transcontinentalmedia.com/LAF/lacom/Aon\\_2018\\_Trends\\_In\\_Global\\_Employee\\_Engagement.pdf](http://images.transcontinentalmedia.com/LAF/lacom/Aon_2018_Trends_In_Global_Employee_Engagement.pdf)



- Aon Hewitt. (2017). *2017 Trends in global employee engagement*.  
<http://www.aon.com/unitedkingdom/attachments/trp/2017-Trends-in-Global-Employee-Engagement.pdf>
- Arakawa, D., & Greenberg, M. (2007). Optimistic managers and their influence on productivity and employee engagement in a technology organization: Implications for coaching psychologists. *International Coaching Psychology Review*, 2(1), 78-89. [http://organisationalpsychology.nz/wp-content/uploads/2019/07/International\\_Coaching\\_Psychology\\_Review\\_Volume\\_2\\_No\\_1\\_March\\_2007.pdf](http://organisationalpsychology.nz/wp-content/uploads/2019/07/International_Coaching_Psychology_Review_Volume_2_No_1_March_2007.pdf)
- Arechar, A. A., Gächter, S., & Molleman, L. 2018. Conducting interactive experiments online. *Experimental Economics*, 21(1), 99-131. <https://doi.org/10.1007/s10683-017-9527-2>
- Asplund, J., Harter, J., Agrawal, S., & Plowman, S. K. (2015). *The relationship between strengths-based employee development and organizational outcomes: 2015 Strengths meta-analysis*. <http://www.gallup.com/services/193394/relationship-strengths-based-employee-development-organizational-outcomes.aspx>
- Aylmer, B. (2017). Putting time into time perspective. In A. Kostic, & D. Chadee (Eds.), *Time perspective: Theory and practice* (pp. 305-308). Macmillan Publishers.  
[https://doi.org/10.1057/978-1-137-60191-9\\_14](https://doi.org/10.1057/978-1-137-60191-9_14)
- Bagozzi, R. P. (1992). The self-regulation of attitudes, intentions, and behavior. *Social Psychology Quarterly*, 55(2), 178-204. <https://doi.org/10.2307/2786945>

- Bailey, C. (2016). Employee engagement: Do practitioners care what academics have to say – And should they? *Human Resource Management Review*, 100589.  
<https://doi.org/10.1016/j.hrmr.2016.12.014>
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 19(1), 31-53. <https://doi.org/10.1111/ijmr.12077>
- Bailey, C., Madden, A., Alfes, K., Fletcher, L., Robinson, D., Holmes, J., Buzzeo, J., Curry, G. (2015). Evaluating the evidence on employee engagement and its potential benefits to NHS staff: A narrative synthesis of the literature. *Health Services and Delivery Research*, 3(26), 1-424. <https://doi.org/10.3310/hsdr03260>
- Bailey, C., Yeoman, R., Madden, A., Thompson, M., & Kerridge, G. (2019). A review of the empirical literature on meaningful work: Progress and research agenda. *Human Resource Development Review*, 18(1), 1-31.  
<https://doi.org/10.1177%2F1534484318804653>
- Bakker, A. B. (2017). Strategic and proactive approaches to work engagement. *Organizational Dynamics*, 46(2), 67-75.  
<https://doi.org/10.1016/j.orgdyn.2017.04.002>
- Bakker, A. B., & Demerouti, E. (2007, April 3). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.  
<https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demouretti, E. (2017). Jobs demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>

- Balducci, C., Fraccaroli, F., & Schaufel, W. (2010). Psychometric properties of the Italian version of the Utrecht Work Engagement Scale (UWES-9): A cross-cultural analysis. *European Journal of Psychological Assessment*, 26(2), 143-149. <https://doi.org/10.1027/1015-5759/a000020>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1991). Self-regulation of motivation through anticipatory and self-reactive mechanisms. In R. A. Dienstbier (Ed.), *Nebraska Symposium on Motivation, 1990* (Vol. 38, pp. 69-164). University of Nebraska Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman and Company.
- Bandura, A. (2001a). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Bandura, A. (2001b). Social cognitive theory of mass communication. *Media Psychology*, 3(3), 265-299. [https://doi.org/10.1207/s1532785xmep0303\\_03](https://doi.org/10.1207/s1532785xmep0303_03)
- Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal*, 19(1), 60-65. <https://doi.org/10.4103/0972-6748.77642>
- Barber, L., Grawitch, M. J., & Munz, D. C. (2013). Are better sleepers more engaged workers? A self-regulatory approach to sleep hygiene and work engagement. *Stress & Health*, 29, 307-316. <https://doi.org/10.1002/smi.2468>
- Barbieri, B., Dal Corso, L., Di Sipio, A. M., De Carlo, A., & Benevene, P. (2016). Small opportunities are often the beginning of great enterprises: The role of work engagement in support of people through the recovery process and in preventing

relapse in drug and alcohol abuse. *Work*, 55, 373-383.

<https://doi.org/10.3233/WOR-162411>

Barends, A. J., & de Vries, R. E. 2019. Noncompliant responding: Comparing exclusion criteria in MTurk personality research to improve data quality. *Personality and Individual Differences*, (143), 84-89. <https://doi.org/10.1016/j.paid.2019.02.015>

Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review*, 38(1), 132-153. <https://doi.org/10.5465/amr.2010.0479>

Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58(1), 111-135. <https://doi.org/10.5465/amj.2013.0227>

Barrio, R. J., Sala-i-Martin, X. (2004). *Economic growth* (2nd ed.). MIT Press.

Becker, G. S. (1964). *Human Capital: A theoretical and empirical analysis with special reference to education*. National Bureau of Economic Research distributed by Columbia University Press.

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.

Bergson, H. (2002). *Time and free will: An essay on the immediate data of consciousness* (2nd ed.). Routledge (Original work published 1889).

Bianchi, E. M. (2018). Meaning of work for managers in the Brazilian contemporary business context. *Revista de administração Mackenzie (Mackenzie Management Review)*, 19(5), 1-29. <https://doi.org/10.1590/1678-6971/eramg180046>

- Biggs, A., Brough, P., & Barbour, J. P. (2014). Strategic alignment with organizational priorities and work engagement: A multi-wave analysis. *Journal of Organizational Behavior*, 35(3), 301-317. <https://doi.org/10.1002/job.1866>
- Bock, M. E. (1975, January 1). Minimax estimators of the mean of a multivariate normal distribution. *The Annals of Statistics*, 3(1), 209-218. <https://doi.org/10.1214/aos/1176343009>
- Bodecka, M., Nowakowska, I., Zajenkowska, A., Rajchert, J., Kazmierczak, I., & Jelonkiewicz, I. (2021). Gender as a moderator between Present-Hedonistic time perspective and depressive symptoms or stress during COVID-19 lock-down. *Personality and Individual Differences*, 168, 110395. <https://doi.org/10.1016/j.paid.2020.110395>
- Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smith, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, 13(1), 119. <https://doi.org/10.1186/1471-2458-13-119>
- Bolotova, A. K., & Hachaturova, M. R. (2013). The role of time perspective in coping behavior. *Psychology in Russia: State of the Art*, 6(3), 120-131. <https://doi.org/10.11621/pir.2013.0311>
- Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on Psychological Science*, 8, 591-612. <https://doi.org/10.1177/1745691613504116>
- Boniwell, I. (2009). Perspectives on time. In C. R. Snyder, & S. J. Lopez (Eds.), *Oxford handbook of positive psychology* (pp. 295-302). Oxford University Press.

- Boniwell, I., & Osin, E. (2015). Time perspective coaching. In M. Stolarski, N. Fiedulaine, & W. van Beek (Eds.), *Time Perspective Theory; Review, Research, and Application* (pp. 451-469). Springer. [https://doi.org/10.1007/978-3-319-07368-2\\_29](https://doi.org/10.1007/978-3-319-07368-2_29)
- Boniwell, I., & P. Zimbardo P. G. (2004). Balancing time perspective in pursuit of optimal functioning. In P. A. Linley, & S. Joseph (Eds.), *Positive psychology in practice* (pp. 105-178). John Wiley & Sons.
- Boniwell, I., & Zimbardo, P. (2003). Time to find the right balance. *The Psychologist*, 16(3), 129-131. [https://thepsychologist.s3.eu-west-2.amazonaws.com/articles/pdfs/0303positive.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA3JJOMCSRX35UA6UU%2F20211003%2F%2F%2Fs3%2Faws4\\_request&X-Amz-Date=20211003T145849Z&X-Amz-SignedHeaders=Host&X-Amz-](https://thepsychologist.s3.eu-west-2.amazonaws.com/articles/pdfs/0303positive.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA3JJOMCSRX35UA6UU%2F20211003%2F%2F%2Fs3%2Faws4_request&X-Amz-Date=20211003T145849Z&X-Amz-SignedHeaders=Host&X-Amz-)
- Boniwell, I., Osin, E., Linley, P. A., & Ivanchenko, G. V. (2010, January 28). A question of balance: Time perspective and well-being in British and Russian samples. *The Journal of Positive Psychology*, 5(1), 24-40. <https://doi.org/10.1080/17439760903271181>
- Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on Psychological Science*, 8, 591-612. <https://doi.org/10.1177/1745691613504116>
- Bourdon, O., Raymond, C., Marin, M.-F., Olivera-Figueroa, L., Lupien, S. J., & Juster, R.-P. (2020). A time to be chronically stressed? Maladaptive time perspectives as

associated with allostatic load. *Biological Psychology*, 152, 107871.

<https://doi.org/10.1016/j.biopsycho.2020.107871>

Bowles, T. V. (2018). Motivation to the past, present, and future: Time orientation and disorientation before therapy. *Australian Psychologist*, 53(3), 223-235.

<https://doi.org/0.1111/ap.12289>

Boyd, J. N., & Zimbardo P. G. (2005). Time perspective, health, and risk-taking. In A. Strathman, & J. Joireman (Eds.), *Understanding behavior in the context of time: Theory, research, and application* (pp. 85-107). Routledge.

Boyd, J. N., & Zimbardo, P. G. (2008). *An overview of time perspective types: Time perspective biases: General, phenomenological characterizations of each time perspective*. [www.thetimeparadox.com](http://www.thetimeparadox.com):

<http://www.thetimeparadox.com/2008/08/03/an-overview-of-time-perspective-types/>

Brace, N., Kemp, R., & Snelgar, R. (2016). *SPSS for Psychologists* (6th ed.). Palgrave

Briker, R., Walter, F., & Cole, M. A. (2020). The consequences of (not) seeing eye-to-eye about the past: The role of supervisor-team fit in past temporal focus for supervisors leadership behavior. *Journal of Organizational Behavior*, 41(3), 244-

262. <https://doi.org/10.1002/job.2416>

Brule, G., & Morgan, R. (2018). Editorial: Working with stress: Can we turn distress into eustress? *Journal of Neuropsychology & Stress Management*, 3, 1-3.

[https://www.researchgate.net/publication/324531212\\_Editorial\\_Working\\_with\\_stress\\_can\\_we\\_turn\\_distress\\_into\\_eustress](https://www.researchgate.net/publication/324531212_Editorial_Working_with_stress_can_we_turn_distress_into_eustress)

- Bucci, A., Prettner, K., & Prskawetz.(Eds.) (2019). *Human capital and economic growth: The impact of health, education, and demographic change*. Palgrave Macmillan.  
<https://doi.org/10.1007/978-3-030-21599-6>
- Buhrmester, M., Talaifar, S., & Gosling, S. (2018). An evaluation of Amazon's Mechanical Turk, its rapid rise, and its effective use. *Perspectives on Psychological Science*, 13(2), 149-154.  
<https://doi.org/10.1177/1745691617706516>
- Bureau of Labor Statistics. (2021). *The employment situation March 2021*.  
<https://www.bls.gov/news.release/pdf/empsit.pdf>
- Buric, I., & Macuka, I. (2018). Self-efficacy, emotions, and work engagement among teachers: A two wave cross-lagged analysis. *Journal of Happiness Studies*, 19(7), 1917-1933. <https://doi.org/10.1007/s10902-017-9903-9>
- Burnes, B., & Cooke, B. (2013). Kurt Lewin's field theory: A review and re-evaluation. *International Journal of Management Reviews*, 15(4), 408-425.  
<https://doi.org/10.1111/j.1468-2370.2012.00348.x>
- Burnham, M. J., Le, Y. K., & Piedmont, R. L. (2018). Who is Mturk? Personal characteristics and sample consistency of these online workers. *Mental Health, Religion, & Culture*, 21(9-10), 934-944.  
<https://doi.org/10.1080/13674676.2018.1486394>
- Carelli, M.G., & Olsson, C. J. (2015). Neural correlates of time perspective. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; Review, research and application; Essays in Honor of Philip G. Zimbardo* (pp. 231-242). Springer. [https://doi.org/10.1007/978-3-319-07368-2\\_15](https://doi.org/10.1007/978-3-319-07368-2_15)



- Carelli, M. G., & Wiberg, B. (2012). Time out of mind. *Journal of Attention Disorders*, 16(6), 460-466. <https://doi.org/10.1177/1087054711398861>
- Carpenter, S., & Huffman, K. (2013). Sensation and perception. In S. Carpenter, & K. Huffman, *Visualizing psychology* (3rd ed., pp. 86-117). John Wiley & Sons.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control theory approach to human behavior*. Springer-Verlag.
- Carver, C. S., & Scheier, M. F. (1993). Vigilant and avoidant coping in two patient samples. In H. W. Krohne (Ed.), *Attention and avoidance: Strategies in coping with aversiveness* (pp. 295-320). Hogrefe & Huber.
- Carver, C. S., & Scheier, M. F. (2014). Dispositional optimism. *Trends in cognitive sciences*, 18(6), 293-299. <https://doi.org/10.1016/j.tics.2014.02.003>
- Carver, C. S., & Scheier, M. F. (2016). Self-regulation and action. In K. D. Vohs, & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (3rd ed.). Guilford Publications.
- Casey, L. S. (2017). Intertemporal differences among MTurk workers: Time-based sample variations and implications for online data collection. *SAGE Open*, 7(2). <https://doi.org/10.1177/2158244017712774>
- Castellano, E., Munoz-Navarro, R., Toledo, M. S., Sponton, C., & Medrano, L. A. (2019). Cognitive processes of emotional regulation, burnout and work engagement. *Psicothema*, 31(1), 73-80. <https://doi.org/10.7334/psicothema2018.228>

- Catalino, L. I., & Fredrickson, B. L. (2011). A Tuesday in the life of a flourisher: The role of positive emotional reactivity in optimal mental health. *Emotion, 11*(4), 938-950. <https://doi.org/10.1037/a0024889>
- Catalino, L. I., Algoe, S. B., & Fredrickson, B. L. (2014). Prioritizing positivity: An effective approach to pursuing happiness? *Emotion, 14*(6), 1155-1161. <https://doi.org/10.1037/a0038029>
- Chandler, J. J., & Paolacci, G. (2017). Lie for a dime: When most prescreening responses are honest but most study participants are impostors. *Social Psychological and Personality Science, 8*(5), 500-508. <https://doi.org/10.1177/1948550617698203>
- Cheng, C. (2003). Cognitive and motivational processes underlying coping flexibility: A dual process model. *Journal of Personality and Social Psychology, 73*(2), 425-438. <https://doi.org/10.1037/0022-3514.84.2.425>
- Cheng, C., & Cheung, M. W. (2005). Cognitive processes underlying coping flexibility: differentiation and integration. *Journal of Personality, 73*(4), 859-886. <https://doi.org/10.1111/j.1467-6494.2005.00331.x>
- Cheung, J. H., Burns, D. K., Sinclair, R. R., & Sliter, M. (2017). Amazon Mechanical Turk in organizational psychology: An evaluation and practical recommendations. *Journal of Business and Psychology, 32*(4) 347-361. <https://doi.org/10.1007/s10869-016-9458-5>
- Chmitorz, A., Kunzler, A., Helmreich, I., Tuscher, O., Kalisch, R., Kubiak, T., Wessa, M., Lieb, K. (2018). Intervention studies to foster resilience: A systematic review and proposal for a resilience framework in future intervention studies. *Clinical Psychology Review, 59*, 78-100. <https://doi.org/10.1016/j.cpr.2017.11.002>

- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011, February 17). Work engagement: A quantitative review and test of its relation with task and contextual performance. *Personnel Psychology*, 64(1), 89-136.  
<https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Chulanova, Z. K., Satybaldin, A. A., & Koshanov, A. K. (2019). Methodology for assessing the state of human capital in the context of innovative development of the economy: A three-level approach. *Journal of Asian Finance, Economics and Business*, 6(1), 321-328. <https://doi.org/10.13106/jafeb.2019.vol6.no1.321>
- CISCO. (2020). *Transitioning to workforce 2020 [White paper]*.  
[https://www.cisco.com/c/dam/en\\_us/training-events/employer\\_resources/pdfs/Workforce\\_2020\\_White\\_Paper.pdf](https://www.cisco.com/c/dam/en_us/training-events/employer_resources/pdfs/Workforce_2020_White_Paper.pdf)
- Claus, L. (2019). HR disruption-Time already to reinvent talent management. *BRQ Business Research Quarterly*, 22(3), 207-215.  
<https://doi.org/10.1016/j.brq.2019.04.002>
- Clifford, S., & Jerit, J. (2014). Is there a cost to convenience? An experimental comparison of data quality in laboratory and online studies. *Journal of Experimental Political Science*, 1(2), 120-131. <https://doi.org/10.1017/xps.2014.5>
- Coghill, D., Toplak, M., Rhodes, S., & Adamo, N. (2018). Cognitive functioning in ADHD, Inhibition, memory, temporal discounting, decision-making, timing and reaction time variability. In T. Banaschewski, D. Coghill, & A. Zuddas (Eds.), *Oxford Textbook of Attention Deficit Hyperactivity Disorder* (pp. 94-102). Oxford University Press.

- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.  
<https://doi.org/10.1037/0033-2909.112.1.155>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.).  
Lawrence Erlbaum Associates.
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease.  
*Journal of the American Medical Association (JAMA)*, 298(14), 1685-1687.  
<https://doi.org/10.1001/jama.298.14.1685>
- Cojuharenco, I., Patient, D., & Bashur, M. R. (2011). Seeing the “forest” or the “trees” of  
organizational justice: Effects of temporal perspective on employee concerns  
about unfair treatment at work. *Organizational Behavior and Human Decision  
Processes*, 116(1), 17-31. <https://doi.org/10.1016/j.obhdp.2011.05.008>
- Cook, D. R. (1977). Detection of influential observation in linear regression.  
*Technometrics*, 19(1), 15-18. <https://doi.org/10.2307/1268249>
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis  
issues for field settings*. Rand-McNally
- Coon, D., Mitterer, J., & Martini, T. (2019). *Introduction to Psychology: Gateways to  
Mind and Behavior*. Cengage Learning.
- Cortina, J. (1993). What is coefficient alpha? An examination of theory and applications.  
*Journal of Applied Psychology*, 78(1), 98-104. <https://doi.org/10.1037/0021-9010.78.1.98>
- Cottle, T. J. (1976). *Perceiving time: A psychological investigation with men and women*.  
John Wiley & Sons.

- Crawford, E. R., Lepine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology, 95*, 834-848.  
<https://doi.org/10.1037/a0019364>
- Creswell, J. W., & Creswell, D. J. (2018). *Research design: Qualitative, Quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Crocket, R. A., Weinman, J., Hankins, M., & Marteau, T. (2009). Time orientation and health-related behavior: Measurement in general population samples. *Psychology and Health, 24*(3), 333-350. <https://doi.org/10.1080/08870440701813030>
- D'Alessio, M. D., Guarino, A., De Pascalis, V., & Zimbardo P. G. (2003). Testing Zimbardo's Stanford time perspective inventory (STPI) - Short form. *Time & Society, 12*(2), 333-347. <https://doi.org/10.1177/0961463X030122010>
- Dassen, F. C., Houben, K., & Jansen, A. (2015). Time orientation and eating behavior: Unhealthy eaters consider immediate consequences, while healthy eaters focus on future health. *Appetite, 91*, 13-19. <https://doi.org/10.1016/j.appet.2015.03.020>
- de Bilde, J., Vansteenkiste, M., & Lens, W. (2011). Understanding association between future time perspective and self-regulated learning through the lens of self-determination theory. *Learning and Instruction, 21*(3), 332-344.  
<https://doi.org/10.1016/j.learninstruc.2010.03.002>
- de Guzman, A. B., & Dumantay, M. C. (2019). Examining the role of future time perspective (FTP) and affective commitment on the work engagement of aging Filipino professors: A structural equation model. *Educational Gerontology, 45*(5), 324-333. <https://doi.org/10.1080/03601277.2019.1622243>

- de Lange, A. H., van Yperen, N. W., Bal, P. M., & van der Heijden, B. I. (2008). The role of time perspective in relations between achievement goals, work engagement and performance of post-retired workers. *International Journal of Psychology, 43*(3-4), 562-563. <https://doi.org/10.1080/00207594.2008.10108486>
- Deloitte Insights. (2019). *Leading the social enterprise: Reinvent with a human focus: 2019 Deloitte global human capital trends*. Deloitte Insights. [https://www2.deloitte.com/content/dam/insights/us/articles/5136\\_HC-Trends-2019/DI\\_HC-Trends-2019.pdf](https://www2.deloitte.com/content/dam/insights/us/articles/5136_HC-Trends-2019/DI_HC-Trends-2019.pdf)
- Deloitte Insights. (2020). *2020 Global Human Capital Trends: The social enterprise at work: Paradox as a path forward*. <https://www2.deloitte.com/us/en/insights/focus/human-capital-trends.html>
- Demerouti, E., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512. <https://doi.org/10.1037//0021-9010.86.3.499>
- Denscombe, M. (2014). *The good research guide* (5th ed.). Open University Press.
- Dennis, S. A., Goodson, B. M., & Pearson, C. (2020). Online workers fraud and evolving threats to the integrity of MTurk data: A discussion of virtual private servers and the limitations of IP-Based screening procedures. *Behavioral Research in Accounting, 32*(1), 119-134. <https://doi.org/10.2308/bria-18-044>
- Denny, B. T., Inhoff, M. C., Zerubavel, N., Davachi, L., & Ochsner, K. N. (2015). Getting over it: Long-lasting effects of emotion regulation on amygdala response. *Psychological Science, 26*(9), 1377-1388. <https://doi.org/110.1177/0956797615578863>

- De Volder, M. L., & Lens, W. (1982). Academic achievement and future time perspective as a cognitive-motivational concept. *Journal of Personality and Social Psychology*, 42(3), 566-571. <https://doi.org/10.1037/0022-3514.42.3.566>
- Dijksterhuis, A. C. (2007). Effects of priming and perception on social behavior and goal pursuit. In J. A. Bargh (Ed.), *Frontiers of social psychology. Social Psychology and the unconscious: The automaticity of higher mental processes* (pp. 51-132). Psychology Press.
- Dijksterhuis, A., & Aarts, H. (2010). Goals, attention, and unconscious. *Annual Review of Psychology*, 61, 467-490. <https://doi.org/10.1146/annurev.psych.093008.100445>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, phone, mail, and mixed-mode surveys: The tailored design method (4<sup>th</sup> edition). John Wiley & Sons.
- Dimsdale, J. E. (2008). Psychological stress and cardiovascular disease. *Journal of America College of Cardiology*, 51(13), 1237-1246. <https://doi.org/10.1016/j.jacc.2007.12.024>
- Drake, L., Duncan, E., Sutherland, F., Abernethy, C., & Henry, C. (2008). Time perspective and correlates of well-being. *Time & Society*, 17(1), 47-61. <https://doi.org/10.1177/0961463x07086304>
- Dresp-Langley, B. (2012). Why the brain knows more than we do: Non-conscious representations and their role in the construction of conscious experience. *Brain Sciences*, 2(1), 1-21. <https://doi.org/10.3390/brainsci2010001>
- Dunkley, D. M., Lewkowski, M., Lee, I. A., Preacher, K. J., Zuroff, D. C.,

Berg, J.-L., Foley, E., Myhr, G., Westreich, R. (2017). Daily stress, coping, and negative and positive affect in depression: Complex trigger and maintenance patterns. *Behavior Therapy*, 48(3), 349-365.

<https://doi.org/10.1016/j.beth.2016.06.001>

Dunkley, D. M., Ma, D., Lee, I. A., Preacher, K. J., & Zuroff, D. C. (2014). Advancing complex explanatory conceptualizations of daily negative and positive affect: Trigger and maintenance coping action patterns. *Journal of Counseling Psychology*, 61(1), 93-109. <https://doi.org/10.1037/a0034673>

Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, 84(1), 234-252.

<https://doi.org/10.1037/0022-3514.84.1.234>

Eddy, P., Wertheim, E. H., Kingsley, M., & Wright, B. J. (2017, December).

Associations between the effort-reward imbalance model of workplace stress and indices of cardiovascular health: A systematic review and meta-analysis.

*Neuroscience & Biobehavioral Reviews*, 83, 252-256.

<https://doi.org/10.1016/j.neubiorev.2017.10.025>

Edwards, A. J. (2002). *A psychology of orientation: Time awareness across life stages and in dementia*. Praeger Publishers.

Einstein, A. (1933). *On the method of theoretical physics*. Oxford University Press.

Eldor, L., Fried, Y., Westman, M., Levi, A. S., Shipp, A. J., & Slowik, L. H. (2017). The experience of work stress and the context of time: Analyzing the role of



subjective time. *Organizational Psychology Review*, 7(3), 227-249.

<https://doi.org/10.1177%2F2041386617697506>

Ely, R., & Mercurio, A. (2011). Time perspective and autobiographical memory: Individual and gender differences in experiencing time and remembering the past.

*Time & Society*, 20(3), 375-400. <https://doi.org/10.1177%2F0961463X10366081>

Enns, A., Eldridge, G. D., Montgomery, C., & Gonzalez, V. M. (2018). Perceived stress, coping strategies, and emotional intelligence: A cross-sectional study of university students in helping disciplines. *Nurse Education Today*, 68, 226-231.

<https://doi.org/10.1016/j.nedt.2018.06.012>

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*,

5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavioral Research Methods*, 41(4), 1149-1160.

<https://doi.org/10.3758/brm.41.4.1149>

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.

<https://doi.org/10.3758/bf03193146>

Fioulaine, N. (2017). Time perspective and cannabis use: Why and how it is more complex than we think. In A. Kostic, & D. Chadee (Eds.), *Time perspective:*

*Theory and practice* (pp. 195-215). Palgrave Macmillan.

[https://doi.org/10.1057/978-1-137-60191-9\\_9](https://doi.org/10.1057/978-1-137-60191-9_9)

Fioulaine, N., Apostolidis, T., & Olivetto, F. (2006). Precariousness and psychological disorders: The mediating effect of the temporal perspective. *The International Papers of Social Psychology*, 72(4), 51-64. <https://doi.org/10.3917/cips.072.0051>

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906-911.

<https://doi.org/10.1037/0003-066X.34.10.906>

Flavell, J. H. (1987). Metacognition, motivation and understanding. In F. E. Weinert, & R. H. Kluwe (Eds.), *Speculations about the nature and development of metacognition* (pp. 21-29). Lawrence Erlbaum Associates.

Fleming, P. (2017). The human capital hoax: Work, debt and insecurity in the era of uberization. *Organization Studies*, 38(5), 691-709.

<https://doi.org/10.1177/0170840616686129>

Fletcher, L. (2017). The everyday experiences of personal role engagement: What matters most? *Human Resource Development Quarterly*, 28(4), 451-479.

<https://doi.org/10.1002/hrdq.21288>

Fletcher, L., & Robinson, D. (2014). Measuring and understanding engagement. In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 273-290). Routledge.

<https://doi.org/10.4324/9780203076965>

- Fletcher, L., Bailey, C., & Gilman, M. W. (2018). Fluctuating levels of personal role engagement within the working day: A multilevel study. *Human Resource Management Journal*, 28(1), 128-147. <https://doi.org/10.1111/1748-8583.12168>
- Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist*, 55(6), 647-654. <https://doi.org/10.1037/0003-066x.55.6.647>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388. <https://doi.org/10.1177/002224378101800313>
- Foy, T., Dwyer, R. J., Nafarrete, R., Hammoud, M. S., & Pat, R. (2019). Managing job performance, social support and work-life conflict to reduce workplace stress. *International Journal of Productivity and Performance Management*, 68(6), 1018-1041. <https://doi.org/10.1108/IJPPM-03-2017-0061>
- Fraisse, P. (1963). *The psychology of time*. Harper & Row.
- Fraisse, P. (1981). Cognition of time in human activity. In G. d'Ydewalle, & W. Lens (Eds.), *Cognition in human motivation and behavior* (pp. 233-259). Leuven University Press; Lawrence Erlbaum Associates.
- Fraisse, P. (1984). Perception and estimation of time. *Annual Review of Psychology*, 35(1), 1-36. <https://doi.org/10.1146/annurev.psych.35.1.1>
- Fraisse's theory of time. (2006). In J. E. Roedelein (Ed.), *Elsevier's dictionary of psychological theories*. Elsevier.
- Frank, L. K. (1939). Time perspectives. *Journal of Social Philosophy*, 4, 293-312.

- Fraser, J. T. (Ed.). (1989). *Time and mind: Interdisciplinary issues, The study of time, VI*. International Universities Press.
- Frith, B. (2017, March 21). *Stress affecting employee engagement*.  
<http://hrmagazine.co.uk/article-details/stress-affecting-employee-engagement>
- Froehlich, D. E., Beusaert, S. A., & Segers, M. S. (2015, May 10). Great expectations: The relationship between future time perspective, learning from others, and employability. *Vocations and Learning, 8*, 213-227.  
<https://doi.org/10.1007/s12186-015-9131-6>
- Fry, P. S., & Debats, D. L. (2011). Cognitive beliefs and future time perspectives: Predictors of mortality and longevity. *Journal of Aging Research, 2011*(Article ID 367902), 1-13. <https://doi.org/10.4061/2011/367902>
- Fung, H. H., & Isaacowitz, D. M. (2016). The role of time perspective in age-related processes: Introduction to the special issue. *Psychology and Aging, 31*(6), 553-557. <https://doi.org/10.1037/pag0000119>
- Gabrian, M., Dutt, A. J., & Wahl, H.W. (2017). Subjective time perceptions and aging well: A review of concepts and empirical research - A mini-review. *Gerontology, 63*(4), 350-358. <https://doi.org/10.1159/000470906>
- Gacs, B., Birkas, B., & Csatho, A. (2020). Time perspectives and pain: Negative time perspective profile elevated vulnerability to pain. *Personality and Individual Differences, 153*, 109616. <https://doi.org/10.1016/j.paid.2019.109616>
- Gallup. (2018, August 30). *Employee engagement on the rise in the U.S.*  
<https://news.gallup.com/poll/241649/employee-engagement-rise.aspx>

- Gallup. (2021). *What is employee engagement and how do you improve it?* Gallup Workplace: <https://www.gallup.com/workplace/285674/improve-employee-engagement-workplace.aspx>
- Garcia, D., Salier, U., Nima, A. A., & Archer, T. (2016, March 26). Questions of time and affect: A person's affectivity profile, time perspective, and well-being. *PeerJ*, 4(e1826). <https://doi.org/10.7717/peerj.1826>
- Garg, N. (2014). Employee engagement and individual differences: A study in Indian context. *Management Studies and Economic Systems*, 1(1), 41-50. <https://doi.org/10.2139/ssrn.2693436>
- George, D., & Mallery, P. (2020). *IBM SPSS Statistics 26 step by step: A simple guide and reference* (16th ed.). Routledge.
- George, J. M. (2010). More engagement is not necessarily better: The benefits of fluctuating levels of engagement. In S. L. Albrecht (Ed.), *New horizons in management. Handbook of employee engagement. Perspectives, issues, research and practice* (3rd ed., pp. 253-263). Edward Elgar Publishing. <https://doi.org/10.4337/9781849806374.00029>
- George, J. M. (2009). The Illusion of will in organizational behavior research: Nonconscious processes and job design. *Journal of Management*, 35(6), 1318-1339. <https://doi.org/10.1177/0149206309346337>
- George, J. M. (2011). The wider context, costs and benefits of work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 53-59. <https://doi.org/10.1080/1359432x.2010.509924>

- Gerlich, N. R., Drumheller, K., Clark, R., & Baskin, M. B. (2018). Mechanical Turk: Is it just another convenience sample? *The Global Journal of Business Disciplines*, 2(1), 45-55. [https://www.igbr.org/wp-content/Journals/2018/GJBD\\_Vol\\_2\\_No\\_1\\_2018.pdf](https://www.igbr.org/wp-content/Journals/2018/GJBD_Vol_2_No_1_2018.pdf)
- Ghosh, R., Shuck, B., Cumberland, D., & D'Mello, J. (2019). Building psychological capital and employee engagement: Is formal mentoring a useful strategic human resource development intervention? *Performance Improvement Quarterly*, 32(1), 37-54. <https://doi.org/10.1002/piq.21285>
- Gilbert, E., Foulk, T., & Bono, J. (2018). Building personal resources through interventions: An integrative review. *Journal of Organizational Behavior*, 39(2), 24-228. <https://doi.org/10.1002/job.2198>
- Gjesme, T. (1983). On the concept of future time orientation: Considerations of some functions' and measurements' implications. *International Journal of Psychology*, 18(1-4), 443-461. <https://doi.org/10.1080/00207598308247493>
- Glazer, S., & Liu, C. (2017). Work, stress, coping, and stress management. In *Oxford research encyclopedia of psychology*. <https://doi.org/10.1093/acrefore/9780190236557.013.30>
- Goetzl, R. Z., Roemer, E. C., Hologue, C., Fallin, M. D., McCleary, K., Eaton, W., Agnew, J., Azocar, F., Balland, D., Bartlett, J., Braga, M., Conway, H., Crighton, K. A., Frank, R., Jinnett, K., Keller-Green, Rauch, S. M., Safeer, R., Saporito, D., ...D., Mattingly, C. R. (2018, April). Mental health in the workplace: A call to action proceedings from the mental health in the workplace: Public health

summit. *Journal of Occupational and Environmental Medicine*, 60(4), 322-330.  
<https://doi.org/10.1097/jom.0000000000001271>

Gonzalez-Roma, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006, February).  
Burnout and work engagement; Independent factors or opposite poles? *Journal of Vocational Behavior*, 68(1), 165-174. <https://doi.org/10.1016/j.jvb.2005.01.003>

Graffigna, G. (2017). Is a transdisciplinary theory of engagement in organized settings possible? A concept analysis of the Literature on employee engagement, consumer engagement and patient engagement. *Frontiers in Psychology*, 8, 1-17.  
<https://doi.org/10.3389/fpsyg.2017.00872>

Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house." *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2), 12-26. <https://doi.org/10.5929/2014.4.2.9>

Gray, R. (2016, April 16). *Employee engagement closely tied to health and well-being*.  
<http://www.hrmagazine.co.uk/article-details/employee-engagement-closely-tied-to-health-and-well-being>

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362. <https://doi.org/10.1037/0022-3514.85.2.348>

Guest, D. (2014). Employee engagement: A skeptical analysis. *Journal of Organizational Effectiveness*, 1(2), 141-156. <http://doi.org/10.1108/JOEPP-04-2014-0017>

- Guest, D. (2018, September 5-7). Human resource management, well-being and performance: Exploring the links [Keynote]. *The 13th European Academy of Occupational Health Psychology Conference*, (p. 2).  
[http://www.eaohp.org/uploads/1/1/0/2/11022736/2018\\_book\\_of\\_proceedings.pdf](http://www.eaohp.org/uploads/1/1/0/2/11022736/2018_book_of_proceedings.pdf)
- Gunz, H. P., & Peiperl, M. (Eds.). (2007). *Handbook of career studies*. Sage Publications.
- Gupta, M., & Shaheen, M. (2018). Does work engagement enhance general well-being and control at work? Mediating role of psychological capital. *Evidence-based HRM*, 6(3), 272-286. <https://doi.org/10.1108/EBHRM-05-2017-0027>
- Guyau, J. M. (1890). *La genese de l'idee de temps (The genesis of the idea of time)*. Alcan. <https://babel.hathitrust.org/cgi/pt?id=uc1.b3929225;view=1up;seq=16>
- Guyau's theory of time. (2006). In J. E. Roedkelein (Ed.), *Elsevier's dictionary of psychological theories*. Elsevier Science & Technology.  
[http://lynx.lib.usm.edu/login?url=https://search.credoreference.com/content/entry/estpsyctheory/guyau\\_s\\_theory\\_of\\_time/0?institutionId=3440](http://lynx.lib.usm.edu/login?url=https://search.credoreference.com/content/entry/estpsyctheory/guyau_s_theory_of_time/0?institutionId=3440)
- Hackman, R. J., & Oldman, G. R. (1980). *Work redesign*. Addison-Wesley.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson.
- Hall, P. A., & Fong, G. T. (2003). The effects of a brief time perspective intervention for increasing physical activity among young adults. *Psychology and Health*, 18(6), 685-706. <https://doi.org/10.1080/0887044031000110447>
- Hanson, L. L., Westerlund, H., Goldberg, M., Zins, M., Vahtera, J., Rod, N. H., Stenholm, S., Steptoe, A., Kivimaki, M. (2017). Work stress, anthropometry, lung function, blood pressure, and blood-based bio-markers: A cross-sectional study of



43,593 french men and women. *Scientific Reports*, 7(1), 1-9.

<https://doi.org/10.1038/s41598-017-07508-x>

Hargrove, M. B., Nelson, D. L., & Cooper, G. L. (2013). Generating eustress by challenging employees. *Organizational Dynamics*, 42(1), 61-69.

<https://doi.org/10.1016/j.orgdyn.2012.12.008>

Hart, C. (2018). *Doing a literature review: Releasing the social science research imagination* (2nd ed.). SAGE Publications.

Harter, J. (2021, July 29). *U.S. employee engagement holds steady in first half of 2021*.

<https://www.gallup.com/workplace/352949/employee-engagement-holds-steady-first-half-2021.aspx>

Harter, J., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.

<https://doi.org/10.1037//0021-9010.87.2.268>

Harter, J., & Stone, A. (2012). Engaging and disengaging work conditions, momentary experiences and cortisol response. *Motivation and Emotion*, 36, 104-113.

<https://doi.org/10.1007/s11031-011-9231-z>

Hazelton, S. (2014). Positive emotions boost employee engagement: Making work fun brings individual and organizational success. *Human Resource Management International Digest*, 22(1), 34-37.

<https://doi.org/10.1108/HRMID-01-2014-0012>

Heinrich Heine Universität Düsseldorf. (2021). *General psychology and work psychology*. G\*Power Statistical Analysis for MAC and Windows:

<https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower>

Hellebuyck, M., Nguyen, T., Halphern, M., Fritze, D., & Kennedy, J. (2017). *Mind the workplace.*

<http://www.mentalhealthamerica.net/sites/default/files/Mind%20the%20Workplace%20-%20MHA%20Workplace%20Health%20Survey%202017%20FINAL.pdf>

Henry, H., Zacher, H., & Desmette, D. (2017, March 28). Future time perspective in the work context: A systematic review of quantitative studies. *Frontiers in Psychology*, 8, 413. <https://doi.org/10.3389/fpsyg.2017.00413>

Hergenhahn, B. R., & Henly, T. B. (2014). *An introduction to the history of psychology* (7th ed.). Cengage Learning.

Hernandez, M., & Guarana, C. L. (2018). An examination of the temporal intricacies of job engagement. *Journal of Management*, 44(5), 1711-1735.

<https://doi.org/10.1177/0149206315622573>

Hickman, A., & Robinson, J. (January, 2020). *Is working remotely effective? Gallup research says yes.* Gallup Workplace:

<https://www.gallup.com/workplace/283985/working-remotely-effective-gallup-research-says-yes.aspx>

Holman, E. A., & P. Zimbardo P. G. (2009). The social language of time: Time perspective and social relationships. *Basic and Applied Social Psychology*, 31(2), 136-147. <https://doi.org/10.1080/01973530902880415>

Holton, M. K., Barry, A. E., & Chaney, J. D. (2016). Employee stress management: An examination of adaptive and maladaptive coping strategies on employee health.

*Work: A Journal of Prevention, Assessment, and Rehabilitation*, 53(2), 299-305.

<https://doi.org/10.3233/WOR-152145>

Hornik, J., & Zakay, D. (1996). Psychological time: The case of time and consumer behavior. *Time & Society*, 5(3), 385-397.

<https://doi.org/10.1177%2F0961463X96005003007>

Huang, J. L., Bowling, N. A., Liu, M., & Li, Y. (2015). Detecting insufficient effort responding with an infrequency scale: Evaluating validity and participant reactions. *Journal of Business and Psychology*, 30(2), 299-311.

<https://doi.org/10.1007/s10869-014-9357-6>

Huber, P. J. (1981). *Robust Statistics*. Wiley.

Huff, R. (2018, October 4). *Human capital*. <https://www.britannica.com/topic/human-capital>

Imperator, B. (2017). *Engagement and disengagement at work: Drivers and organizational practices to sustain employee passion and performance*. Springer International Publishing AG. <https://doi.org/10.1007/978-3-319-51886-2>

Ipsen, C., Karanika-Murray, M., & Nardelli, G. (2020). Addressing mental health and organizational performance in tandem: A challenge and an opportunity for bringing together what belongs together. *Work & Stress: An International Journal of Work, Health & Organizations*, 34(1), 1-4.

<https://doi.org/10.1080/02678373.2020.1719555>

ISST. (2018, October 17). *J. T. Fraser - International Society for the Study of Time*.

<http://www.studyoftime.org/ContentPage.aspx?ID=28>

- Jacobs-Lawson, J., & Hershey, D. A. (2005, December 1). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement savings behaviors. *Financial Services Review*, *14*(4), 331-344.  
<https://www.researchgate.net/publication/228634854> Influence of Future Time Perspective Financial Knowledge and Financial Risk Tolerance on Retirement Saving Behaviors
- James, W. (2011). The perception of time. In W. James, *The principles of psychology (Volume 1 of 2)*. Digireads.com Publishing (Original work published 1890).
- Jeske, D., Sheehan, M., Linehan, C., & Moran, M. (2017, February). Employee engagement in discussion: Goals, perspectives, and recommendations. *Journal of Human Resources Management*, *20*(2), 21-29. <https://www.jhrm.eu/2017/10/21-employee-engagement-in-discussion-goals-perspectives-and-recommendations/>
- Jesson, J., Matheson, L., & Lacey, F. M. (2011). *Doing your literature review: Traditional and systematic techniques*. SAGE Publications.
- Jhangiani, R., Chiang, I.-C. A., Cutler, C., & Leighton, D. (2019). *Research Methods in Psychology* (4th ed.). Kwantlen Polytechnic University - Press Books.  
<https://kpu.pressbooks.pub/psychmethods4e/chapter/correlational-research/>
- Jhangiani, R., Tarry, H., & Stangor, C. (2014). Individual differences in person perception. *Principles of social psychology-1st International Edition*. Open Book Publishing. <https://opentextbc.ca/socialpsychology/chapter/individual-and-cultural-differences-in-person-perception/>
- Jochemczyk, L., Pietrzak, J., Buczkowski, R., Stolarski, M., & Markiewicz, L. (2017, September 1). You only live once: Present-hedonistic time perspective predicts

risk propensity. *Personality and Individual Differences*, 115, 148-153.

<https://doi.org/10.1016/j.paid.2016.03.010>

Johnson, S., Robertson, I., & Cooper, G. L. (2018). *Well-being: Productivity and happiness at work* (2nd ed.). Springer International Publishing AG.

<https://doi.org/10.1007/978-3-319-62548-5>

Joireman, J., Shaffer, M. J., Balliet, D., & Strathman, D. (2012). Promotion orientation explains why future-oriented people exercise and eat healthy: Evidence from the two-factor consideration of future consequences-14 scale. *Personality & Social Psychology Bulletin*, 38(10), 1272-1287.

<https://doi.org/10.1177/0146167212449362>

Jones, J. M. (1993). An exploration of temporality in human behavior. In R. C. Schank, & E. Langer (Eds.), *Beliefs, reasoning, and decision making: Psychology in honor of Bob Abelson* (pp. 389-411). Lawrence Erlbaum Associates.

Jones, J. M. (1988). Cultural differences in temporal perspectives: Instrumental and expressive behaviors in time. In J. E. McGrath (Ed.), *Sage focus editions, Vol. 91. The social psychology of time: New perspectives* (pp. 21-38). Sage Publications.

Joo, B. K., Zigarmi, D., Nimon, K., & Shuck, B. (2017). Work cognition and psychological well-being: The role of cognitive engagement as a partial mediator. *Journal of Applied Behavioral Science*, 53(4), 446-469.

<https://doi.org/10.1177/0021886316688780>

Kahn, W. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.

<https://doi.org/10.2307/256287>

- Kahn, W. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321-349. <https://doi.org/10.1177/001872679204500402>
- Kahn, W. (2019). Dynamics and implications of distress organizing. *Academy of Management Journal*, 62(5), 1471-1497. <https://doi.org/10.5465/amj.2016.0319>
- Kahn, W., & Fellows, S. (2013). Employee engagement and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 105-126). American Psychological Association.  
<https://doi.org/10.1037/14183-006>
- Kahn, W., & Heaphy, E. D. (2014). Relational contexts of personal engagement at work. In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 82-96). Routledge.
- Kairys, A., & Liniauskaite, A. (2015). Time perspective and personality. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; Review, research and application; Essays in Honor of Philip G. Zimbardo* (pp. 99-113). Springer International Publishing. [https://doi.org/10.1007/978-3-319-07368-2\\_6](https://doi.org/10.1007/978-3-319-07368-2_6)
- Kaiser, S., & Schulze, G. C. (2018). Person-environment analysis: A framework for participatory holistic research. *Gestalt Theory*, 40(1), 59-74.  
<https://doi.org/10.2478/gth-2018-0005>
- Kallus, K. W. (2016). Stress and recovery: An overview. In K. W. Kallus, & M. Kellman (Eds.), *Recovery-Stress Questionnaire for Athletes User Manual* (pp. 27-48). Pearson.
- Kalokerinos, E. K., Erbas, Y., Ceulemans, E., & Kuppens, P. (2019). Differentiate to regulate: Low negative emotion differentiation is associated with ineffective use

- but not selection of emotion-regulation strategies. *Psychological Science*, 30(6), 863-879. <https://doi.org/10.1177%2F0956797619838763>
- Kaplan, S., Bradley-Geist, J. C., Ahmad, A., Anderson, A., Hargrove, A. K., & Lindsey, A. (2014). A test of two positive psychology interventions to increase well-being. *Journal of Business and Psychology*, 29(3), 367-380. <https://doi.org/10.1007/s10869-013-9319-4>
- Kaplan, S. A., Dye, C. E., & Wong, C. M. (2018). On the subjective experience and correlates of downtime at work: A mixed-method examination. *Journal of Organizational Behavior*, 40(3), 360-381. <https://doi.org/10.1002/job.2336>
- Kaplan, S., & Orlikowski, W. J. (2013). Temporal work in strategy making. *Organization Science*, 24(4), 965-995. <https://doi.org/10.1287/orsc.1120.0792>
- Katana, M., Hill, P. L., & Allemand, M. (2020). Future time perspective and affect in daily life across adulthood and old age: Findings from two micro-longitudinal studies. *Journal of Personality*, 88(5), 950-964. <https://doi.org/10.1111/jopy.12543>
- Kazakina, E., & van Beek, W. (2017). Temporal focus in psychotherapy: Clinical tales of past, present and future. In A. Kostic, & D. Chadee (Eds.), *Time Perspective* (pp. 239-266). Palgrave MacMillan. [https://doi.org/10.1057/978-1-137-60191-9\\_11](https://doi.org/10.1057/978-1-137-60191-9_11)
- Keenoy, T. (2014). Engagement: A murmuration of objects? In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 196-220). Routledge.

- Kell, H. J., Robbins, S. B., Su, R., & Brenneman, M. (2018). *A psychological approach to human capital*, ETS Research Report Series, (8)1, 1-23.  
<https://doi.org/10.1002/ets2.12218>
- Kelliher, C., Hailey, V. H., & Frandale, E. (2013). Employee engagement in multinational organizations. In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 194-208). Routledge. <https://doi.org/10.4324/9780203076965-20>
- Kermott, C. A., Johnson, R. E., Sood, R., Jenkins, S. M., & Sood, A. (2019). Is higher resilience predictive of lower stress and better mental health among corporate executives? *PLoS One*, 14(6), e0218092.  
<https://doi.org/10.1371/journal.pone.0218092>
- Khodakarami, N., Dirani, K., & Rezaei, F. (2018). Employee engagement: Finding a generally accepted measurement scale. *Industrial and Commercial Training*, 50(6), 305-311. <https://doi.org/10.1108/ict-11-2017-0090>
- Kiker, B. F. (1966). The historical roots of the concept of human capital. *Journal of Political Economy*, 74(5), 481-499. <https://doi.org/10.1086/259201>
- Kim, N., & Kang, S.W. (2017). Older and more engaged: The mediating role of age-linked resources on work engagement. *Human Resource Management*, 56(5), 731-746. <https://doi.org/10.1002/hrm.21802>
- Kline, P. (2000). *The handbook of psychological testing* (2nd ed.). Routledge.
- Kooij, D. T., Kanfer, R., Betts, M., & Rudolph, C. W. (2018). Future time perspective: A systematic review and meta-analysis. *Journal of Applied Psychology*, 103(8), 867-893. <https://doi.org/10.1037/apl0000306>



- Kooij, D. T., Tims, M., & Akkermans, J. (2017). The influence of future time perspective on work engagement and job performance: The role of job crafting. *European Journal of Work and Organizational Psychology, 26*(1), 4-15.  
<https://doi.org/10.1080/1359432X.2016.1209489>
- Koolhaas, J. M., Bartolomucci, A., Buwalda, B., de Boer, S. F., Flugge, G., Korte, S. M., Meerlo, P., Murison, R., Olivier, B., Palanza, P., Richter-Levin, G., Sgoifo, A., Steimer, T., Stiedl, O., van Dijk, G., Wöhr, M., Fuchs, E. (2011). Stress revisited: a critical evaluation of the stress concept. *Neuroscience & Biobehavioral Reviews, 35*(5), 1291-1301. <https://doi.org/10.1016/j.neubiorev.2011.02.003>
- Korn Ferry. (2020). *Are firms flunking stress tests?* Korn Ferry Institute:  
<https://www.kornferry.com/insights/articles/workplace-stress-rising-employee-engagement>
- Korner, A., Reitzle, M., & Silbereisen, R. K. (2012). Work-related demands and life satisfaction: The effects of engagement and disengagement among employed and long-term unemployed people. *Journal of Vocational Behavior, 80*(1), 187-196.  
<https://doi.org/10.1016/j.jvb.2011.05.004>
- Kostal, J., Klicperova-Baker, M., Lukavska, K., & Lukavsky, J. (2016). Short version of the Zimbardo Time Perspective Inventory (ZTPI-short) with and without the Future-Negative scale, verified on nationally representative samples. *Time and Society, 25*(2), 169-192. <https://doi.org/10.1177/0961463X15577254>
- Kostic, A., & Chadee, D. (Eds.). (2017). *Time perspective: Theory and practice*. Macmillan Publishers. <https://doi.org/10.1057/978-1-137-60191-9>

- Kuhnel, J., Sonnentag, S., & Bledow, R. (2012). Resources and time pressure as a day-level antecedent of work engagement. *Journal of Occupational and Organizational Psychology*, 85(1), 181-198. <https://doi.org/10.1111/j.2044-8325.2011.02022.x>
- Kuhnel, J., Zacher, H., De Bloom, J., & Bledow, R. (2017). Take a Break! Benefits of Sleep and Short Breaks for Daily Work Engagement. *European Journal of Work and Organizational Psychology*, 26(4), 481-491. <https://doi.org/10.1080/1359432X.2016.1269750>
- Labovitz, S., & Hagedorn, R. (1971). *Introduction to social research*. McGraw-Hill.
- Laerd Statistics. (2018). *The null and alternate hypothesis*. <https://statistics.laerd.com/statistical-guides/hypothesis-testing-3.php>
- Laerd Statistics. (2015). *Multiple regression using SPSS Statistics*. Statistical tutorials and software guides. <https://statistics.laerd.com/premium/spss/mr/multiple-regression-in-spss-20.php>
- Laerd Statistics. (2020). *Pearson's product-moment correlation*. Statistical tutorials and software guides. <https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide-2.php>
- Laghi, F., Baiocco, R., Liga, F., Guarino, A., & Baumgartner, E. (2013). Identity status differences among Italian adolescents: Associations with time perspective. *Child and Youth Services Review*, 35(3), 482-487. <https://doi.org/10.1016/j.childyouth.2012.12.018>

- Lang, F. R., & Carstensen, L. L. (2002). Time counts: Future time perspective, goals, and social relationships. *Psychology and Aging, 17*(1), 125-139.  
<https://doi.org/10.1037//0882-7974.17.1.125>
- Lasane, T. P., & O'Donnell, D. A. (2005). Time orientation measurement: A conceptual approach. In A. Strathman, & J. Joireman (Eds.), *Understanding behavior in the context of time: Theory, research, and application* (pp. 11-30). Routledge.
- Laureiro-Martinez, D., Trujillo, C. A., & Unda, J. (2017, February 17). Time perspective and age: A review of age-associated differences. *Frontiers in Psychology, 8*, 101.  
<https://doi.org/10.3389/fpsyg.2017.00101>
- Lavrakas, P. J. (Ed.). (2008). *Encyclopedia of survey research methods*. Sage Publications. <https://doi.org/10.4135/9781412963947>
- Layous, K., Chancellor, J., & Lyubomirsky, S. (2014). Positive activities as protective factors against mental health conditions. *Journal of Abnormal Psychology, 123*(1), 3-12. <https://doi.org/10.1037/a0034709>
- Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist, 46*(4), 352-367. <https://doi.org/10.1037/0003-066X.46.4.352>
- Lazarus, R. S. (1982). Thoughts on relations between emotion and cognition. *American Psychologist, 37*(9), 1019-1024. <https://doi.org/10.1037/0003-066x.37.9.1019>
- Lazarus, R. S. (2020). Psychological stress in the workplace. In P. L. Perrewe, & R. Crandall (Eds.), *Occupational stress: A handbook* (pp. 3-14). CRC Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.

- Lee, J. Y., Rocco, T. S., & Shuck, B. (2020). What is a resource: Toward a taxonomy of resources for employee engagement. *Human Resource Development Review*, 19(1), 5-38. <https://doi.org/10.1177/1534484319853100>
- Lee, M. C., Idris, M. A., & Delfabbro, P. H. (2017). The linkages between hierarchical culture and empowering leadership and their effects on employees' work engagement: Work meaningfulness as a mediator. *International Journal of Stress Management*, 24(4), 392-415. <https://doi.org/10.1037/str0000043>
- Lee, S., Koffer, R. E., Sprague, B. N., Charles, S. T., Ram, N., & Almeida, D. M. (2018). Activity diversity and its association with psychological well-being across adulthood. *The Journals of Gerontology: Series B*, 73(6), 985-995. <https://doi.org/10.1093/geronb/gbw118>
- Lefevre, H. K., Mirabel-Sarron, C., Docteur, A., Leclerc, V., Laszcz, Gorwood, P., & Bungener, C. (2019). Time perspective differences between depressed patients and non-depressed participants, and their relationships with depressive and anxiety symptoms. *Journal of Affective Disorders*, 246(1), 320-326. <https://doi.org/10.1016/j.jad.2018.12.053>
- Lemarie, L., Bellavance, F., & Chebat, J.-C. (2019). Regulatory focus, time perspective, locus control and sensation-seeking as predictors. *Accident Analysis & Prevention*, 127, 19-27. <https://doi.org/10.1016/j.aap.2019.02.025>
- Lenderman, E. A. (2018). *Human capital management: A brief review of human capital management, organizational psychology, and theories in economics*. Lenderman, Erik A.

- Lens, W., Paixao, M. P., Herrera, D., & Grobler, A. (2012). Future time perspective as a motivational variable: Content and extension of future goals affect the quantity and quality of motivation. *Japanese Psychological Research*, 54(3), 321-333. <https://doi.org/10.1111/j.1468-5884.2012.00520.x>
- Lerner, J., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision-making. *Annual Review of Psychology*, 66(1), 799-823. <https://doi.org/10.1146/annurev-psych-010213-115043>
- Levasseur, L., Shipp, A. J., Fried, Y., Rousseau, D. M., & P. Zimbardo P. G. (2020, March 20). New perspectives on time perspective and temporal focus. *Journal of Organizational Behavior*, 41(3), 235-243. <https://doi.org/10.1002/job.2435>
- Levine, M. W., & Shefner, J. M. (1981). *Fundamentals of selection and perception*. Addison-Wesley.
- Levine, R. (1998). *A geography of time: The temporal misadventures of a social psychologist, or how every culture keeps time just a little bit differently*. Basic Books.
- Lewin, K. (1935). *A dynamic theory of personality - selected papers*. (D. K. Adams, & K. E. Zener, Trans.) McGraw-Hill. <http://gestalttheory.net/archive/lewinp.pdf>
- Lewin, K. (1936). *Principles of topological psychology* (1st ed.). (G. M. Heider, & F. Heider, Trans.) McGraw-Hill. <https://doi.org/10.1037/10019-000>
- Lewin, K. (1940). Formalization and progress in psychology. In G. W. Lewin (Ed.), *Resolving social conflicts and field theory in social science* (pp. 169-190). American Psychological Association. <https://doi.org/10.1037/10269-017>

- Lewin, K. (1942a). Field theory and learning. In G. W. Lewin (Ed.), *Resolving social conflicts and field theory in social science* (pp. 212-230). American Psychological Association. <https://doi.org/10.1037/10269-018>
- Lewin, K. (1942b). Time perspective and morale. In G. W. Lewin (Ed.), *Resolving social conflicts and field theory in social science* (pp. 80-93). American Psychological Association. <https://doi.org/10.1037/10269-007>
- Lewin, K. (1943). Defining the field at a given time. *Psychological Review*, 50(3), (pp. 200-211). <https://doi.org/10.1037/h0062738>
- Lewin, K. (1946). Behavior and development as a function of the total situation. In G. W. Lewin (Ed.), *Resolving social conflicts and field theory in social science* (pp. 337-381). American Psychological Association. <https://doi.org/10.1037/10269-024>
- Lewin, K., & Cartwright, D. (1951, September). Field theory in social science: Selected theoretical papers. (D. Cartwright, Ed.) *Social Service Review*, 25(3), 409-410. <https://doi.org/10.1086/638467>
- Lewis, R., Donaldson-Feilder, & Pangallo, A. (2011). *Developing resilience*. Affinity Health at Work. Chartered Institute of Personnel and Development. <https://www.cipd.co.uk/knowledge/culture/well-being/resilience-report#>
- Lind, A. E., & Tyler, T. R. (1988). *The social psychology of procedural justice*. (M. J. Lerner, Ed.), Springer Science+Business Media.
- Littman-Ovadia, H., & Balducci, C. (2013). Psychometric properties of the Hebrew version of the Utrecht Work Engagement Scale (UWES-9). *European Journal of Psychological Assessment*, 29, 58-63. <https://doi.org/10.1027/1015-5759/a000121>

- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Prentice-Hall.
- Lopez, S. J., Pedrotti, J. T. & Snyder, C. R. (2019). *Positive psychology: The Scientific and practical explorations of human strengths* (4th ed.). SAGE Publications.
- Lorente, L., Salanova, M., Martinez, I. M., & Vera, M. (2014). How personal resources predict work engagement and self-rated performance among construction workers: A social cognitive perspective. *International Journal of Psychology*, 49(3), 200-207. <https://doi.org/10.1002/ijop.12049>
- Luthans, F. (2017). Voice of a "seasoned" OB professor. *Industrial and Organizational Psychology*, 10(4), 577-584. <https://doi.org/10.1017/iop.2017.58>
- Luthans, F., & Peterson, S. J. (2002). Employee engagement and manager self-efficacy: Implications for managerial effectiveness and development. *Journal of Management Development*, 21(5), 376-387. <https://doi.org/10.1108/02621710210426864>
- Luthans, F., & Youssef, C. M. (2004). Human, social and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33(2), 143-160. <https://doi.org/10.1016/j.orgdyn.2004.01.003>
- Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47(1), 45-50. <https://doi.org/10.1016/j.bushor.2003.11.007>
- Luthans, F., Youssef-Morgan, C. M., & Avoilio, B. J. (2015). *Psychological capital and beyond*. Oxford University Press.

- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the competitive edge*. Oxford University Press.
- Macey, W. H., & Schneider, B. (2008, March). The meaning of employee engagement. *Industrial and Organizational Psychology, Perspectives on Science and Practice*, 1(1), 3-30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>
- Maddux, J. E. (2009). Self-efficacy: The power of believing you can. In S. J. Lopez, & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (2nd ed., pp. 335-343). Oxford University Press.
- Madl, T., Baars, B. J., & Franklin, S. (2011, April 25). The timing of the cognitive cycle. (K. J. Friston, Ed.) *PLoS One*, 6(4), e14803. <https://doi.org/10.1371/journal.pone.0014803>
- Maltese, A. (2018, June 17). [www.quantumworkplace.com](http://www.quantumworkplace.com). <https://www.quantumworkplace.com/future-of-work/why-employee-engagement-programs-fail>
- Marrow, A. J. (1969a). Tension systems and field theory. In A. J. Marrow, *The practical theorist: The life and works of Kurt Lewin* (pp. 29-39). Basic Books.
- Marrow, A. J. (1969b). Growing renown. In A. J. Marrow, *The practical theorist: The life and works of Kurt Lewin* (pp. 48-63). Basic Books.
- Marshall, A. (1885). How far do remediable causes influence prejudicially (a) the continuity of employment, (b) the rates of wages? *The report of the proceedings and papers at the Prince's Hall, Piccadilly* (pp. 173-199). Cassell & Company. <https://babel.hathitrust.org/cgi/pt?id=nyp.33433007428745;view=1up;seq=203>



- Marshall, A. (2013). *Principles of economics* (8th ed.). Palgrave MacMillian (Original work published 1890).
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. Jossey-Bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001, February). Job burnout. *Annual Review of Psychology*, *52*, 397-422.  
<https://doi.org/10.1146/annurev.psych.52.1.397>
- Maslow, A. H. (1970). *Motivation and personality*. Harper & Row.
- Mausch, J., & Birch, J. W. (1998). *Guide to the successful thesis and dissertation: A handbook for students and faculty*. CRC Press.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, *77*(1), 11-37.  
<https://doi.org/10.1348/096317904322915892>
- Mazareanu, E. (2019, November 7). *Spending in the training industry in U.S. 2012-2019*.  
<https://www.statista.com/statistics/788521/training-expenditures-united-states/>
- McCarty, C., House, M., Harman, J., & Richards, S. (2006). Effort in phone survey response rates: The effects of vendor client-controlled factors. *Field Methods*, *18*(2), 172-188. <https://doi.org/10.1177/1525822x05282259>
- McEwen, B. S. (2019). What Is the confusion With cortisol? *Chronic Stress*, *3*, 247054701983364. <https://doi.org/10.1177%2F2470547019833647>

- McEwen, B. S., & Akil, H. (2020). Revisiting the stress concept: Implications for affective disorders. *The Journal of Neuroscience*, 40(1), 12-21.  
<https://doi.org/10.1523/jneurosci.0733-19.2019>
- McEwen, B. S., Bowles, N. P., Gray, J. D., Hill, M. N., Hunter, R. G., Karatsoreos, I. N., & Nasca, C. (2015, September 25). Mechanisms of stress in the brain. *Nature Neuroscience*, 18(10), 1353-1363. <https://doi.org/10.1038/nn.4086>
- McGrath, J. E., & Kelly, J. R. (1986). *The Guilford social psychology series. Time and human interaction: Toward a social psychology of time*. Guilford Press.
- McKay, M. T., Worrell, F. C., Temple, E. C., Perry, J. L., Cole, J. C., & Mello, Z. R. (2015, January 16). Less is not always more: The case of the 36-item short form of the Zimbardo Time Perspective Inventory. *Personality and Individual Differences*, 72, 68-71. <https://doi.org/10.1016/j.paid.2014.08.018>
- McKay, M. T., Worrell, F. C., Temple, E. C., Perry, J., & Cole, J. C. (2014, October). A critical examination of the reliability and validity of the SZTPI-15 in British, American and Australian samples. *Personality and Individual Differences*, 69, 168-172. <https://doi.org/10.1016/j.paid.2014.05.030>
- McTaggart, J. E. (1908). The unreality of time. *Mind: A Quarterly Review of Psychology and Philosophy*, IVII(4), 457-474. <https://doi.org/10.1093/mind/XVII.4.457>
- Medrano, L. A., & Trogolo, M. A. (2018). Employee well-being and life satisfaction in Argentina: The contribution of psychological detachment from work. *Journal of Work and Organizational Psychology*, 34(2), 69-81.  
<https://doi.org/10.5093/jwop2018a9>

- Mello, Z. R., & Worrell, F. C. (2015). The past, the present, and the future: A conceptual model of time perspective in adolescence. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; review, research and application; Essays in Honor of Philip G. Zimbardo* (pp. 115-129). Springer International Publishing.  
[https://doi.org/10.1007/978-3-319-07368-2\\_7](https://doi.org/10.1007/978-3-319-07368-2_7)
- Merriam, S. B., & Simpson, E. L. (1995). *A guide to research for educators and trainers of adults* (2nd ed.), Kreiger Publishing Company.
- Metcalf, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, *106*(1), 3-19.  
<https://doi.org/10.1037/0033-295x.106.1.3>
- Michon, J. A., Pouthas, V., & Jackson, J. L. (2008). *Jean-Marie Guyau (1854-1888): Life and ideas*.  
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.9993&rep=rep1&type=pdf>
- Mincer, J. (1958, August). Investment in human capital and personal income distribution. *Journal of Political Economy*, *66*(4), 281-302. <https://doi.org/10.1086/258055>
- Mincer, J. (1962, October). On-the-job training: Costs, returns, and some implications. *Journal of Political Economy*, *70*(5, Part 2), 50-79.  
<https://doi.org/10.1086/258725>
- Mincer, J. (1974). *Schooling, experience, and earnings: Human behavior and social institutions No. 2*. National Bureau of Economic Research.
- Moeller, J., Ivcevic, Z., White, A. E., Menges, J. I., & Brackett, M. A. (2018). Highly engaged but burned out: Intra-individual profiles in the US workforce. *Career*

*Development International*, 23(1), 86-105. <https://doi.org/10.1108/cdi-12-2016-0215>

Morgan, J. (2017). *The employee experience advantage*. John Wiley & Sons.

MotiveX. (2017). *Why employee engagement is not improving (Whitepaper)*.

<https://img1.wsimg.com/blobby/go/68c41948-d937-41c5-953b-a2f866ed61b2/downloads/MotiveX%20White%20Paper-Why%20Employee%20Engagement%20Is.pdf?ver=1620318234692>

Motyka, B. (2018, September 30). Employee engagement and performance: A systematic literature review. *International Journal of Management and Economics*, 54(3), 227-244. <https://doi.org/10.2478/ijme-2018-0018>

Myers, M. C., van Woerkom, M., & Bakker, A. B. (2013). The added value of the positive: A literature review of positive psychology interventions in organizations. *European Journal of Work and Organizational Psychology*, 22(5), 618-632. <https://doi.org/10.1080/1359432X.2012.694689>

Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and social psychology review*, 10(3), 235-251. [https://doi.org/10.1207%2Fs15327957pspr1003\\_3](https://doi.org/10.1207%2Fs15327957pspr1003_3)

Nigah, N., Davis, A. J., & Hurrell, S. A. (2012). The impact of buddying on psychological capital and work engagement: An empirical study of socialization in the professional services sector. *Thunderbird International Business Review*, 54(6), 891-905. <https://doi.org/10.1002/tie.21510>

- Nimon, K., & Zigarmi, D. (2015). The work cognition inventory: Initial evidence of construct validity for the revised form. *Journal of career assessment*, 23(1), 117-136. <https://doi.org/0.1177%2F1069072714523241>
- Nunez, R. E., & Sweetser, E. (2006). With the future behind them: Convergent evidence from Aymara language and gesture in the crosslinguistic comparison of spatial construals of time. *Cognitive science*, 30(3), 401-450. [https://doi.org/10.1207/s15516709cog0000\\_62](https://doi.org/10.1207/s15516709cog0000_62)
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. Mc-Graw-Hill
- Nuttin, J., & Lens, W. (1985). *Future time perspective and motivation: Theory and research method* (2nd ed.). Psychology Press.
- Oishi, S., Diener, E., & Lucas, R. E. (2009). The optimal level of well-being: Can people be too happy? In E. Diener (Ed.), *The Science of Well-Being. Social Indicators Research Series* (Vol. 37, pp. 175-200). Springer. [https://doi.org/10.1007/978-90-481-2350-6\\_8](https://doi.org/10.1007/978-90-481-2350-6_8)
- Okkonen, J., Vuori, V., & Palvalin, M. (2019). Digitalization changing work: Employees' view on the benefits and hindrances. In A. Rocha, C. Ferras, & M. Paredes (Eds.), *Information Technology and Systems, Advances in Intelligent Systems and Computing* (Vol. 918, pp. 165-176). Springer. [https://doi.org/10.1007/978-3-030-11890-7\\_17](https://doi.org/10.1007/978-3-030-11890-7_17)
- O'Neill, E., Clarke, P., Fido, D., & Vione, K. C. (2020). The role of future time perspective, body awareness, and social connectedness in the relationship between self-efficacy and resilience. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-020-00434-6>

Ortuno, V. E. (2019). If it ticks like a clock, it should be time perspective. In L. Oliveira (Ed.), *Managing Screen Time in an Online Society (Advances in Human and Social Aspects of Technology Series)* (pp. 246-265). IGI Global.

<https://doi.org/10.4018/978-1-5225-8163-5.ch011>

Ortuno, V., & Cordeiro, P. (Eds.). (2013). *International studies in time perspective*. Coimbra University Press. <https://doi.org/10.14195/978-989-26-0775-7>

Ortuno, V., & Vasquez-Echeverria, A. (2013). Time perspective and self-esteem:

Negative temporalities affects the way we judge ourselves. *Annales Universitatis Paedagogicae Cracoviensis. Studia Psychologica*, 6, 109-125.

[https://www.researchgate.net/publication/255907745\\_Time\\_Perspective\\_and\\_Self-Esteem\\_Negative\\_Temporality\\_Affects\\_the\\_Way\\_We\\_Judge\\_Ourselves](https://www.researchgate.net/publication/255907745_Time_Perspective_and_Self-Esteem_Negative_Temporality_Affects_the_Way_We_Judge_Ourselves)

Otoo, F. N. (2019). Human resource management (HRM) practices and organizational performance: The mediating role of employee competencies. *Employee Relations*, 41(5), 949-970. <https://doi.org/10.1108/ER-02-2018-0053>

Ouweneel, E., Le Blanc, P. M., & Schaufeli, W. B. (2013). Do-it-yourself: An online positive psychology intervention to promote positive emotions, self-efficacy, and engagement at work. *Career Development International*, 18(2), 173-195

<https://doi.org/10.1108/CDI-10-2012-0102>

Panke, D. (2018). *Research design & method selection: Making good choices in the social sciences*. SAGE.

Papastamatelou, J., Unger, A., Giotakos, O., & Anthanasiadou, F. (2015). Is time perspective a predictor of anxiety and perceived stress? Some preliminary results

from Greece. *Psychological Studies*, 60(4), 468-477.

<https://doi.org/10.1007/s12646-015-0342-6>

Park, I. J., & Jung, H. (2015). Relationships among future time perspective, career, and organizational self-efficacy, and turnover intention. *Social Behavior and Personality*, 43(9), 1547-1562. <https://doi.org/10.2224/sbp.2015.43.9.1547>

<https://doi.org/10.2224/sbp.2015.43.9.1547>

Parks, A. C., & Biswas-Diener, R. (2013). Positive interventions: Past, present and future. In T. B. Kashdan, & J. Ciarrochi (Eds.), *The context press mindfulness and acceptance practica Series. Mindfulness, acceptance, and positive psychology: The seven foundations of well-being* (pp. 140-165). New Harbinger Publications.

Parker, S. K., & Griffin, M. A. (2011, February 13). Understanding active psychological states: Embedding engagement in a wider nomological net and closer attention to performance. *European Journal of Work and Organizational Psychology*, 20(1), 60-67. <https://doi.org/10.1080/1359432X.2010.532869>

Patel, A. S., Moake, T. R., & Oh, N. (2017). Employee engagement for an increasingly educated workforce: The impact of competitive team climate. *Journal of Personnel Psychology*, 16(4), 186-194. <https://doi.org/10.1027/1866-5888/a000188>

Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Psychology Press.

Peetsma, T., Ven der Veen, I., & Schuitema, J. (2017). Use of time: Time perspective intervention of motivation enhancement. In A. Kostic, & D. Chadee (Eds.), *Time Perspective: Theory and Practice* (pp. 217-213). MacMillan Publishers.

<https://doi.org/10.1057/978-1-137-60191-1>

- Petkovic, A., & Nikolic, V. (2020). Educational needs of employees in work-related stress management. *IOS Press*, 65(3), 661-669. <https://doi.org/10.3233/wor-203120>
- Petty, S. W. (1769). Treatise on taxes and contributions. In *Tracts; Chiefly relating to Ireland* (pp. 1-88). Boulter Grierson.
- <https://babel.hathitrust.org/cgi/pt?id=njp.32101049414582;view=1up;seq=18>
- Pfeffer, J. (2018). *Dying for a Paycheck*. Collins Publishers.
- Phillips, A. C. (2013). Perceived Stress. In M. Gellman, & T. J. Rick (Eds.), *Encyclopedia of Behavioral Medicine* (p. 94). Springer.
- [https://doi.org/10.1007/978-1-4419-1005-9\\_479](https://doi.org/10.1007/978-1-4419-1005-9_479)
- Phillips, P. P., Phillips, J. J., & Aaron, B. (2013). *Survey basics: A complete how-to guide*. ASTD Press.
- Pisanti, R., van der Doef, M., Maes, S., Lazzari, D., & Bertini, M. (2011). Job characteristics, organizational conditions, and distress/well-being among Italian and Dutch nurses: A cross-national comparison. *International Journal of Nursing Studies*, 48(7), 829-837. <https://doi.org/10.1016/j.ijnurstu.2010.12.006>
- Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for social sciences: Analysis with SAS and IBM's SPSS* (6th ed.). Routledge.
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of human capital resource: A multilevel model. *Academy of Management Review*, 36(1), 127-150.
- <https://doi.org/10.5465/amr.2011.55662569>



- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead: Long live human capital resources! *Journal of Management*, *40*(2), 371-398. <https://doi.org/10.1177/0149206313512152>
- Przepiorka, A., & Blachnio, A. (2016, July). Time perspective in Internet and Facebook addiction. *Computers in Human Behavior*, *60*(1), 13-18. <https://doi.org/10.1016/j.chb.2016.02.045>
- Purcell, J. (2014). Disengaging from engagement. *Human Resource Management Journal*, *24*(3), 241-245. <https://doi.org/10.1111/1748-8583.12046>
- Quantum Workplace. (2020, January 30). *What is employee engagement?* <https://www.quantumworkplace.com/future-of-work/what-is-employee-engagement-definition>
- Rabenu, E., & Yaniv, E. (2017). Psychological resources and strategies to cope with stress at work. *International Journal of Psychological Research*, *10*(2), 8-14. <https://doi.org/10.21500/20112084.2698>
- Ramsey, S. R., Thompson, K. L., McKenzie, M., & Rosenbaum, A. (2016). Psychological research in the internet age: The quality of web-based data. *Computers in Human Behavior*, *58*: 354-360. <https://doi.org/10.1016/j.chb.2015.12.049>
- Rand, K. L. (2018). Hope, self-efficacy, and optimism: Conceptual and empirical differences. In M. W. Gallagher, & S. J. Lopez (Eds.), *Oxford library of psychology: The oxford handbook of hope* (pp. 45-58). Oxford University Press.
- Rastogi, A., Pati, S. P., Krishnan, T. N., & Krishnan, S. (2018). Causes, contingencies, and consequences of disengagement at work: An integrative literature review.

*Human Resource Development Review*, 17(1), 62-94.

<https://doi.org/10.1177/1534484317754160>

Rastogi, A., Pati, S. P., Krishnan, T., & Krishnan, S. (2017). Disengagement at work: A conservation of resources perspective. *Academy of Management Proceedings*, 2017(1), 15920. <https://doi.org/10.5465/ambpp.2017.15920abstract>

Ready, S. (2019, March 13). *Five mistakes that hinder employee engagement*.

<https://www.entrepreneur.com/article/330099>

Reio, T. G., & Sanders-Reio, J. (2011). Thinking about workplace engagement: Does supervisor and coworker incivility really matter? *Advances in Developing Human Resources*, 13(4), 462-478. <https://doi.org/10.1177/1523422311430784>

Rich, B. (2006). *Job engagement: Construct validation and relationships with job satisfaction, job involvement, and intrinsic motivation* (Publication No. 3228825). [Doctoral dissertation, University of Florida]. ProQuest.

Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635. <https://doi.org/10.5465/amj.2010.51468988>

Roberts, C. M. (2010). *The dissertation journey* (2nd ed.). Corwin A Sage Company.

Robertson, I., & Cooper, C. L. (2010). Full engagement: the integration of employee engagement and psychological well-being. *Leadership & Organization Development Journal*, 31(4), 324-336.

<https://doi.org/10.1108/01437731011043348>

Robson, C. (2011). *Real world research: A resource for social scientists and practitioner-researchers* (2nd ed.). Blackwell Publishers.

- Roeckelein, J. E. (2000). *The concept of time in psychology: A resource book annotated bibliography*. Greenwood Press. <https://search-credoreference-com.lynx.lib.usm.edu/content/title/estpsyctheory?tab=entries>
- Rossiter, J. R. (2018). The new psychometrics: Comment on Appelbaum et al. (2018). *American Psychologist*, 73(7), 930-931. <http://dx.doi.org/10.1037/amp0000342>
- Rothmann, S. (2013). Employee engagement in the cultural context. In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 177-193). Routledge. <https://doi.org/10.4324/9780203076965-19>
- Rudolph, C. W., Kooij, D. T., Rauvola, R. S., & Zacher, H. (2018). Occupational future time perspective: A meta-analysis of antecedents and outcomes. *Journal of Organizational Behavior*, 39(2 Special Issue: The JOB Annual Review), 229-248. <https://doi.org/10.1002/job.2264>
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450-461. <https://doi.org/10.1037/0022-3514.43.3.450>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619. <https://doi.org/10.1108/02683940610690169>

- Saks, A. M. (2017). Translating employee engagement research into practice. *Organizational Dynamics*, 46(2), 76-86.  
<https://doi.org/10.1016/j.orgdyn.2017.04.003>
- Saks, A. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness: People and Performance*, 6(1), 19-38.  
<https://doi.org/10.1108/JOEPP-06-2018-0034>
- Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155-182.  
<https://doi.org/10.1002/hrdq.21187>
- Sandler, J. (1960). The background of safety. *International Journal of Psychoanalysis*, 41, 352-356. <https://doi.org/10.1007/s00451-019-00356-7>
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th edition). Pearson Education Limited.
- Schaufeli, W. B. (2012). Work engagement: What do we know and where do we go? *Romanian Journal of Applied Psychology*, 14(1), 3-10.  
[https://scholar.google.com/scholar\\_lookup?publication\\_year=2012&pages=3-10&issue=1&author=W.+B.+Schaufeli&title=Work+engagement:+what+do+we+know+and+where+do+we+go?](https://scholar.google.com/scholar_lookup?publication_year=2012&pages=3-10&issue=1&author=W.+B.+Schaufeli&title=Work+engagement:+what+do+we+know+and+where+do+we+go?)
- Schaufeli, W. B. (2014). What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 15-35). Routledge.

- Schaufeli, W. B., & Bakker, A. B. (2004, May). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology*, 20(1), 39-46. <https://doi.org/0.1080/1359432X.2010.515981>
- Schaufeli, W. B., & Taris, T. W. (2013). A critical review of the job demands-resource model: Implications for improving work and health. In G. F. Bauer, & O. Hamming, *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach* (pp. 43-68). [https://doi.org/10.1007/978-94-007-5640-3\\_4](https://doi.org/10.1007/978-94-007-5640-3_4)
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002, March). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92. <https://doi.org/10.1023/A:101563093>
- Schaufeli, W. B., Taris, T. W., & Van Rehenen, W. (2008, April). Workaholism, burnout, and work commitment: Three of a kind or three different kinds of well-being. *Applied Psychology*, 57(2), 173-203. <https://doi.org/10.1111/j.1464-0597.2007.00285.x>
- Schein, E. H. (1987). The clinical perspective in fieldwork. In *Sage University Papers on Qualitative research methods Vol. 5.*, Sage Publications.

- Schiffer, F. (2019). The physical nature of subjective experience and its interaction with the brain. *Medical Hypotheses*, 125, 57-69.  
<https://doi.org/10.1016/j.mehy.2019.02.011>
- Schneider, B., & Meyer, J. P. (2021). Learnings and future directions. In J. P. Meyer, & B. Schneider (Eds.), *A Research Agenda for Employee Engagement in Changing the World of Work* (pp. 263-277). Edward Elgar Publishing.  
<https://doi.org/10.4337/9781789907858.00026>
- Schultz, T. W. (1961, March). Investment in human capital. *The American Economic Review*, 51(1), 1-17. <https://www.jstor.org/stable/1818907>
- Schultz, T. W. (1981). Investment in population quality. In J. M. Leticche (Ed.), *Investing in people: The economics of population quality* (pp. 18-39). University of California Press.
- Sieber, S. D. (1973). The integration of fieldwork and survey methods. *American Journal of Sociology*, 78(6), 1335-1359. <https://doi.org/10.1086/225467>
- Seijts, G. (1998). The Importance of future time perspective in theories of work motivation. *The Journal of Psychology Interdisciplinary and Applied*, 132(2), 154-168. <https://doi.org/10.1080/00223989809599156>
- Sekscinska, K., Rudzinka-Wojciechowska, J., & Maison, D. (2018). Individual differences in time perspectives and risky financial choices. *Personality and Individual Differences*, 120, 118-126. <https://doi.org/10.1016/j.paid.2017.08.038>
- Seligman, M. E. (2006). *Learned optimism: How to change your mind and your life*. Vintage Books.

- Seligman, M. E. (2019). Building human strength: Psychology's forgotten mission. In S. J. Lopez, J. T. Pedrotti, & C. R. Snyder (Eds.), *Positive psychology: The scientific and practical explorations of human strengths*. SAGE Publications.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Wadsworth Cengage Learning.
- Shanafelt, T. D., & Noseworthy, J. H. (2016). Nine organizational strategies to promote engagement and reduce burnout. *Executive Leadership and Physician Well-being*, 92(1), 129-146. <https://doi.org/10.1016/j.mayocp.2016.10.004>
- Shantz, A., Schoenberg, J., & Chan, C. (2013). Relevance of employee engagement across cultures from the perspective of HR professional associations. In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 267-286). Routledge.  
<https://doi.org/10.4324/9780203076965-26>
- Shiel, W. C. (2017, January 15). *Medical definition of working memory*.  
<https://www.medicinenet.com/script/main/art.asp?articlekey=7143>
- Shipp, A. J. (2015). Time in individual-level organizational studies: What it is, how it is used, and why isn't it exploited more often? *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 237-260.  
<https://doi.org/10.1146/annurev-orgpsych-032414-111245>
- Shipp, A. J., & Aeon, B. (2019). Temporal focus: Thinking about the past, present, and future. *Current Opinion in Psychology*, 26, 37-43.  
<https://doi.org/10.1016/j.copsyc.2018.04.005>

- Shipp, A. J., & Fried, Y. (Eds.). (2014a). *Time and work, Volume 1* (1st ed.). Psychology Press. <https://doi.org/10.4324/9781315817019>
- Shipp, A. J., & Fried, Y. (Eds.). (2014b). *Time and work: Volume 2* (Vol. 2). Routledge. <https://doi.org/10.4324/9781315817019>
- Shipp, A. J., Edwards, J. R., & Lambert, L. S. (2009, September). Conceptualization and measurement of temporal focus: The subjective experience of the past, present, and future. *Organizational Behavior and Human Decision Processes*, *110*(1), 1-22. <https://doi.org/10.1016/j.obhdp.2009.05.001>
- Shmotkin, D. (1991). The role of time orientation in life satisfaction across the life span. *Journal of Gerontology*, *46*(5), 243-250. <https://doi.org/10.1093/geronj/46.5.P243>
- Shuck, B. (2011, June 15). Four emerging perspectives of employee engagement: An integrative literature review. *Human Resource Development Review*, *10*(3), 304-328. <https://doi.org/10.1177/1534484311410840>
- Shuck, B. (2019). *Employee engagement: A research overview* (1st ed.). Routledge Taylor & Francis Group. <https://doi.org/10.4324/9781351035064>
- Shuck, B., Adelson, J. L., & Reio, T. G. (2017). The employee engagement scale: Initial evidence for construct validity and implications for theory and practice. *Human Resource Management*, *56*(6), 953-977. <https://doi.org/10.1002/hrm.21811>
- Shuck, B., Allagaraja, M., Rose, K., Owen, J., Osam, K., & Bergman, M. (2017). The health-related upside of employee engagement: Exploratory evidence and implications for theory and practice. *Performance Improvement Quarterly*, *30*(3), 165-178. <https://doi.org/10.1002/piq.21246>



- Shuck, B., Osam, K., Zigarmi, D., & Nimon, K. (2017). Definitional and conceptual muddling: Identifying the positionality of employee engagement and defining the construct. *Human Resource Development Review*, 16(3), 263-293. <https://doi.org/10.1177/1534484317720622>
- Shuck, B., & Reio, T. G. (2011, November). The employee engagement landscape and HRD: How do we link theory and scholarship to current practice? *Advances in Developing Human Resources*, 13(4), 419-428. <https://doi.org/10.1177/1523422311431153>
- Shuck, B., & Reio, T. G. (2014). Employee engagement and well-being: A moderation model and implications for practice. *Journal of Leadership & Organizational Studies*, 21(1), 43-58. <https://doi.org/10.1177/1548051813494240>
- Shuck, B., Reio, T. G., & Rocco, T. S. (2011). Employee engagement: An examination of antecedent and outcome variables. *Human Resources Development International*, 14(4), 427-445. <https://doi.org/10.1080/13678868.2011.601587>
- Shuck, B., Roberts, T. P., & Zigarmi, D. (2018). Employee perceptions of the work environment, motivational outlooks, and employee work intentions: An HR practitioner's dream or nightmare. *Advances in Developing Human Resources*, 20(2), 197-213. <https://doi.org/10.1177/1523422318757209>
- Shuck, B., & Rose, K. (2013). Reframing employee engagement within the context of meaning and purpose: Implications for HRD. *Advances in Developing Human Resources*, 15(4), 341-355. <https://doi.org/10.1177/1523422313503235>

- Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review*, 9(1), 89-110.  
<https://doi.org/10.1177/1534484309353560>
- Shuck, B., Zigarmi, D., & Owen, J. (2015). Psychological needs, engagement, and work intentions: A Bayesian multi-measurement mediation approach and implications for HRD. *European Journal of Training and Development*, 39(1), 2-21.  
<https://doi.org/10.1108/EJTD-08-2014-0061>
- Sia, S. K., Sahoo, B. C., & Duari, P. (2015). Gender discrimination and work engagement: Moderating role of future time perspective. *South Asian Journal of Human Resource Management*, 2(1), 58-84.  
<https://doi.org/10.1177%2F2322093715577443>
- Simon, M., & Goes, J. (2015, February 4). *Definition of terms*.  
<https://www.dissertationrecipes.com/page/3/>
- Sinval, J., Marques-Pinto, A., Queiros, C., & Maroco, J. (2018, January 22). Work engagement among rescue workers: Psychometric properties of the Portuguese UWES. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.02229>
- Sircova, A., Van de Vijver, F. J., Osin, E., Milfont, T. L., Fieulaine, N., Kislali-Erginbilgic, A., & Zimbardo P. G. (2014, January - March). A global look at time: A 24-country study of the equivalence of the Zimbardo Time Perspective. *Sage Open*, 4, 1-12. <https://doi.org/10.1177/2158244013515686>
- Sircova, A., van de Vijver, F. J., Osin, E., Milfont, T. L., Fieulaine, N., Kislali-Erginblgic, A., & Zimbardo P. G. (2015). Time perspective profiles of cultures. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory:*

- Review, research, and application: Essays in Honor of Philip G. Zimbardo* (pp. 169-187). Springer International Publishing. [https://doi.org/10.1007/978-3-319-07368-2\\_11](https://doi.org/10.1007/978-3-319-07368-2_11)
- Slaus, I., & Jacobs, G. (2011, January 7). Human capital and sustainability. *Sustainability Journal*, 3(1), 97-154. <https://doi.org/10.3390/su3010097>
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations, Book II*. Random House.
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In M. W. Gallagher, & S. J. Lopez (Eds.), *Oxford library of psychology: The oxford handbook of hope* (pp. 27-44). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199399314.013.3>
- Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C., & Gatenby, M. (2012). Development and application of a new measure of employee engagement: The ISA engagement scale. *Human Resource Development International*, 15(5), 529-547. <https://doi.org/10.1080/13678868.2012.726542>
- Sobol-Kwapinska, M. (2009). Forms of present time orientation and satisfaction with life in the context of attitudes toward past and future. *Social Behavior and Personality*, 37(4), 433-444. <https://doi.org/10.2224/sbp.2009.37.4.433>
- Sobol-Kwapinska, M., & Jankowski, T. (2016). Positive time: Balanced time perspective and positive orientation. *Journal of Happiness Studies*, 17, 1511-1528. <https://doi.org/10.1007/s10992-01509656-2>
- Solow, R. (1957). Technical change and the aggregate production function. *The Review of Economics and Statistics*, 38(3), 312-320. <https://doi.org/10.2307/1926047>

- Soni, K., & Rastogi, R. (2019). Psychological capital augments employee engagement. *Psychological Studies*, 64(4), 465-473. <https://doi.org/10.1007/s12646-019-00499-x>
- Sonnentag, S. (2012). Time in organizational research: Catching up on a long-neglected topic in order to improve theory. *Organization Psychology Review*, 2(4), 361-368. <https://doi.org/10.1177/2041386612442079>
- Sonnentag, S., Wiegmann, M., & Czink, M. (2021). Empirical approaches to address the dynamic aspects of work engagement: Study design and data analysis. In J. P. Meyer, & B. Schneider (Eds.), *A Research Agenda for Employee Engagement in Changing the World of Work* (pp. 209-224). Edward Elgar Publishing. <https://doi.org/10.4337/9781789907858.00022>
- Spencer-Segal, J. L., & Akil, H. (2019). Glucocorticoids and resilience. *Hormones and Behavior*, 111, 131-134. <https://doi.org/10.1016/j.yhbeh.2018.11.005>
- Sprouse, J. (2011). A validation of Amazon Mechanical Turk for the collection of acceptability judgments in linguistic theory. *Behavior Research Methods*, 43(1), 155-167. <https://doi.org/10.3758/s13428-010-0039-7>
- Stangor, C. (2015). *Research methods for the behavioral sciences*. Cengage Learning.
- Stolarski, M. (2016, October). Not restricted by their personality: Balanced time perspective moderates well-established relationships between personality traits and well-being. *Personality and Individual Differences*, 101, 518-519. <https://doi.org/10.1016/j.paid.2016.05.314>
- Stolarski, M., & Cyniak-Cieciura. (2016, October). Balanced and less traumatized: Balanced time perspective mediates the relationship between temperament and

severity of PTSD syndrome in motor vehicle accident survivor sample.

*Personality and Individual Differences*, 101, 456-461.

<https://doi.org/10.1016/j.paid.2016.06.055>

Stolarski, M., & Witowska, J. (2017). Balancing one's own time perspective from aerial view: Metacognitive processes in temporal framing. In A. Kostic, & D. Chadee (Eds.), *Time Perspective: Theory and Practice* (pp. 117-141). MacMillan Publishers. <https://doi.org/10.1057/978-1-137-60191-9>

Stolarski, M., Bitner, J., & P. Zimbardo P. G. (2011). Time perspective, emotional intelligence and discounting delayed awards. *Time and Society*, 20(3), 346-363. <https://doi.org/10.1177/0961463x11414296>

Stolarski, M., Fieulaine, N., & Van Beek, W. (2015). *Time perspective theory; Review, research and application; Essays in Honor of Philip G. Zimbardo*. (M. Stolarski, N. Fieulaine, & W. van Beek, Eds.) Springer International Publishing. <https://doi.org/10.1007/978-3-319-07368-2>

Stolarski, M., Matthews, G., Postek, S., P. Zimbardo P. G., & Bitner, J. (2014). How we feel is a matter of time: Relationships between time perspectives and mood. *Journal of Happiness Studies*, 15, 809-827. <https://doi.org/10.1007/s10902-013-9450-y>

Stolarski, M., Wiberg, B., & Osin, E. (2015). Assessing temporal harmony: The issue of a balanced time perspective. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; Review, research and application; Essays in Honor of Philip G. Zimbardo* (pp. 57-71). Springer International Publishing. [https://doi.org/10.1007/978-3-319-07368-2\\_3](https://doi.org/10.1007/978-3-319-07368-2_3)

- Stolarski, M., Zajenkowski, M., Jankowski, K. S., & Szymaniak, K. (2020). Deviation from the balanced time perspective: A systematic review of empirical relationships with psychological variables. *Personality and Individual Differences, 156*, 109772. <https://doi.org/10.1016/j.paid.2019.109772>
- Strathman, A., & Joireman, J. (Eds.). (2015). *Understanding behavior in the context of time: Theory, research and application* (2nd ed.). Routledge.
- Sun, L., & Bunchapattanasakda, C. (2019). Employee engagement: A literature review. *International Journal of Human Resources Studies, 9*(1), 63-80. <https://doi.org/10.5296/ijhrs.v9i1.14167>
- Sword, R. (2011). *Time Perspective Therapy*. <http://www.timeperspectivetherapy.org/ztpi/>
- Sword, R. K., & P. Zimbardo P. (2016, July 30). *The importance of our time perspective*. <https://www.psychologytoday.com/us/blog/the-time-cure/201607/the-importance-our-time-perspective>
- Sword, R. M., Sword, R. K., Burnskill, S. R., & P. Zimbardo P. G. (2014, March 3). Time perspective therapy: A new time-based metaphor therapy for PTSD. *Journal of Loss and Trauma, 19*(3), 197-201. <https://doi.org/10.1080/15325024.2013.763632>
- Sword, R., Sword, R., & Brunskill, S. R. (2015). Time perspective therapy: Transforming Zimbardo's temporal theory of clinical practice. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; Review, research, and application; Essays in Honor of Philip G. Zimbardo* (pp. 481-498). Springer International Publishing. [https://doi.org/10.1007/978-3-319-07368-2\\_31](https://doi.org/10.1007/978-3-319-07368-2_31)

- Taber, B. J. (2013). Time perspective and career decision-making difficulties in adults. *Journal of Career Assessment, 21*(2), 200-209.  
<https://doi.org/10.1177/1069072712466722>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6<sup>th</sup> ed.). Pearson Education.
- Taylor, S. E., & Stanton, A. L. (2007). Coping resources, coping processes, and mental health. *Annual Review of Clinical Psychology, 3*, 377-401.  
<https://doi.org/10.1146/annurev.clinpsy.3.022806.091520>
- Teixeira, P. N. (2007). *Jacob Mincer: A founding father of modern labor economics*. Oxford University Press.
- Tement, S. (2014). The role of personal and key resources in the family-to-work. *Scandinavian Journal of Psychology, 55*(5), 489-496.  
<https://doi.org/10.1111/sjop.12146>
- Temple, E., Perry, J. L., Worrell, F. C., Zivkovic, U., Mello, Z. R., Musil, B., Cole, J., McKay, M. T. (2019). The Zimbardo time perspective inventory: Time for a new strategy, not more new shortened versions. *Time & Society, 28*(3), 1167-1180.  
<https://doi.org/10.1177/0961463x17718102>
- The Conference Board. (2020). *From immediate responses to planning for the reimagined workplace*. <https://www.conference-board.org/topics/natural-disasters-pandemics/planning-for-the-reimagined-workplace>

The Predictive Index. (2019). *Employee engagement report*.

[https://resources.predictiveindex.com/wp-content/uploads/2019/06/Engagement\\_Report\\_Final.pdf](https://resources.predictiveindex.com/wp-content/uploads/2019/06/Engagement_Report_Final.pdf)

The University of Iowa. (2020, June 2). Mechanical Turk (MTurk). IRB compliance

MTurk guidance:

<https://www.compliance.iastate.edu/sites/default/files/imported/irb/guide/docs/MTurk-guidance.pdf>

Thomas, K. A., & Clifford, S. (2017). Validity and Mechanical Turk: An assessment of exclusion methods and interactive experiments. *Computers in Human Behavior*, 77: 184-197. <https://doi.org/10.1016/j.chb.2017.08.038>

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuhl, M., Jonides, J., & Gotlib, I. H. (2010). Maladaptive coping, adaptive coping, and depressive symptoms: Variations across age and depressive state. *Behavior Research and Therapy*, 48(6), 459-466. <https://doi.org/10.1016/j.brat.2010.01.007>

Tladinyane, R., & Van der Merwe, M. (2016). Career adaptability and employee engagement of adults employed in an insurance company: An exploratory study. *SA Journal of Human Resources Management*, 14(1), 1-9.

<https://doi.org/10.4102/sajhrm.v14i1.752>

Trahant, B. (2009). Driving better performance through continuous employee engagement. *The Public Manager*, 54-58.

Trommsdorff, G. (1983). Future orientation and socialization. *International Journal of Psychology*, 18(1-4), 381-406. <https://doi.org/10.1080/00207598308247489>



- Truss, C., Delbridge, R., Alfes, A. S., & Soane, E. (Eds.). (2014). *Employee engagement in theory and practice*. Routledge.
- Turner, P. (2020). *Employee engagement in contemporary organizations: Maintaining high productivity and sustained competitiveness*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-36387-1>
- Tzeng, O. C. (1975). Differentiation of affective and denotative meaning systems and their influence in personality ratings. *Journal of Personality and Social Psychology*, 32(6), 978-988. <https://doi.org/10.1037/0022-3514.32.6.978>
- Van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. (2012). For fun, love or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30-55. <https://doi.org/10.1111/j.1464-0597.2011.00454.x>
- Van Beek, W., Berghuis, H., Kerkhof, A., & Beekman, A. (2011, November 1). Time perspective, personality and psychopathology: Zimbardo's time perspective inventory in psychiatry. *Time & Society*, 20(3), 364-374. <https://doi.org/10.1177/0961463x10373960>
- Van den Broeck, A., Van Ruysseveldt, J., Smulders, P., & De Witte, H. (2011). Does an intrinsic work value orientation strengthen the impact of job resources? A perspective from the Job Demands–Resources Model. *European Journal of Work and Organizational Psychology*, 20(5), 581-609. <https://doi.org/10.1080/13594321003669053>

- Van den Berg, R. G. (2021). *SPSS Tutorials*. SPSS Shapiro-Wilk Test – Quick Tutorial with Example: <https://www.spss-tutorials.com/spss-shapiro-wilk-test-for-normality/>
- Van Mol, M. M., Nijkamp, M. D., Bakker, J., Schaufeli, W. B., & Kompanje, E. J. (2018). Counterbalancing work-related stress? Work engagement among intensive care professionals. *Australian Critical Care, 31*(4), 234-241. <https://doi.org/10.1016/j.aucc.2017.05.001>.
- Venter, J., Coetzee, M., & Basson, J. S. (2013). Psychological career resources and work engagement of early career consulting staff. *Journal of Psychology in Africa, 23*(3), 431-438. <https://doi.org/10.1080/14330237.2013.10820648>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems, 28*(2), 118-144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- Vowinckel, J. C., Westerhof, G. J., Bohlmeijer, E. T., & Webster, J. D. (2017). Flourishing in the now: Initial validation of a present-eudaimonic time perspective scale. *Time & Society, 26*(2), 203-226. <https://doi.org/10.1177/0961463x15577277>
- Vuori, J., Tornroos, K., Ruokolainen, M., & Wallin, M. (2019). Enhancing late-career management among aging employees - A randomized controlled trial. *Journal of Vocational Behavior, 115*, 103327. <https://doi.org/10.1016/j.jvb.2019.103327>
- Wadsworth, M. E. (2015). Development of maladaptive coping: A functional adaptation to chronic, uncontrollable stress. *Child Development Perspectives, 9*(2), 96-100. <https://doi.org/10.1111/cdep.12112>

- Watson, G. S., & Durbin, J. (1951). Exact tests of serial correlation using noncircular statistics. *The Annals of Mathematical Statistics*, 22(3), 446-451.  
<https://doi.org/10.1214/aoms/1177729592>
- Webster, C., & Ivanov, S. (2020). Robotics, artificial intelligence, and the evolving nature of work. In B. George, & J. Paul (Eds.), *Digital Transformation in Business and Society Theory and Cases* (pp. 127-143). Palgrave-MacMillan.  
<https://doi.org/10.1007/978-3-030-08277-2>
- Weiss, L. (2018). *How we work*. HarperCollins Publishers.
- Weissenberger, S., Děchtěrenko, F., Klicperova-Baker, M., Vňuková, M., P. Zimbardo P., Raboch, J., Anders, M., Braaten, E., & Ptáček, R. (2020, May 28). ADHD Symptoms in Adults and Time Perspectives - Findings From a Czech National Sample. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.00950>
- Weissenberger, S., Klicperova-Baker, M., Zimbardo P., Schonova, K., Akotia, D., Kostal, J., Geotz, M., Roboc, J. & Ptacek, R. (2016). ADHD and present hedonism: Time perspective as a potential diagnostic and therapeutic tool. *Neuropsychiatry Disease and Treatment*, 12, 2963-2971.  
<https://doi.org/10.2147%2FNDT.S116721>
- Weissenberger, S., Klicperova-Baker, M., Vnukova, M., Raboch, J., & Ptacek, R. (2019). ADHD and time perception: Findings and treatments. *Activitas Nervosa Superior*, 61, 131-135. <https://doi.org/10.1007/s41470-019-00027-2>
- Welbourne, T. M. (2011). Engaged in what? So what? A role-based perspective for the future of employee relations. In A. Wilkinson, & K. Townsend (Eds.), *The future*

*of employee engagement* (pp. 85-100). Palgrave Macmillian.

<https://doi.org/10.1057/9780230349>

Welbourne, J. L., Eggerth, D., Hartley, T. A., Andrew, M. E., & Sanchez, F. (2007).

Coping strategies in the workplace: Relationships with attributional style and job satisfaction. *Journal of Vocational Behavior*, 70(2), 312-325.

<https://doi.org/10.1016/j.jvb.2006.10.006>

Willis Towers Watson. (2017, November 18). *2017/2018 Global benefits attitudes*

*survey*. <https://www.willistowerswatson.com/en-US/insights/2017/11/2017-global-benefits-attitudes-survey>

Willis Towers Watson. (2018). *Technology and software: Willis Towers Watson*

*employee engagement software*. <https://www.towerswatson.com/en-US/Services/Tools/willis-towers-watson-employee-engagement-software>

Wilson, T. D. (2002). *Strangers to ourselves: Discovering the adaptive unconscious*. The Belknap Press of Harvard University Press.

Witowska, J., & Zajenkowski, M. (2019). How is perception of time associated with

cognitive functioning? The relationship between time perspective and executive control. *Time & Society*, 28(3), 1124-1147.

<https://doi.org/10.1177/0961463X18763693>

Wojtkowska, K., Stolarski, M., & Matthews, G. (2019). Time for work: Analyzing the

role of time perspectives in work attitudes and behaviors. *Current Psychology*.

<https://doi.org/10.1007/s12144-019-00536-y>

- Wollard, K. (2011, December 4). Quiet desperation: Another perspective on employee engagement. *Advances in Developing Human Resources*, 13(4), 526-537.  
<https://doi.org/10.1177/1523422311430942>
- Wollard, K., & Shuck, B. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances in Developing Human Resources*, 13(4), 429-446. <https://doi.org/10.01177/1523422311431220>
- Worrell, F. C., & Mello, Z. R. (2007, June 1). The reliability and validity of Zimbardo time perspective inventory scores in academically talented adolescents. *Educational and Psychological Measurement*, 67(3), 487-504.  
<https://doi.org/10.1177/0013164406296985>
- Worrell, F. C., Mello, Z. R., & Buhl, M. (2013). Introducing English and German versions of the adolescent time attitude scale. *Assessment*, 20(4), 496-510.  
<https://doi.org/10.1177/1073191110396202>
- Wundt, W. M. (1897). *Outlines of psychology*. (C. H. Judd, Trans.) Wilhelm Englemann.  
<https://babel.hathitrust.org/cgi/pt?id=wu.89094620317;view=1up;seq=5>
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200. <https://doi.org/10.1348/096317908x285633>
- Xanthopoulou, D., Bakker, A. B., & Illes, R. (2012). Everyday working life: Explaining within-person fluctuations in employee well-being. *Human Relations*, 65(9), 1051-1069. <https://doi.org/10.1177%2F0018726712451283>

- Xu, J., Liu, Y., & Chung, B. (2017). Leader psychological capital and employee work engagement: The roles of employee psychological capital and team collectivism. *Leadership and Organization Development Journal*, 38(7), 969-985.  
<https://doi.org/10.1108/LODJ-05-2016-0126>
- Xu, J., Xie, B., Yang, Y., & Maharjan, D. (2019). Facilitating newcomers' work engagement: The role of organizational socialization and psychological capital. *International Journal of Mental Health Promotion*, 21(2), 69-80.  
<https://doi.org/10.32604/ijmhp.2019.010708>
- Zajenkowski, M., Carelli, M. G., & Ledinska, M. (2015). Cognitive processes in time perspective. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory; Review, research and application; Essays in Honor of Philip G. Zimbardo* (pp. 243-255). Springer International Publishing.  
[https://doi.org/10.1007/978-3-319-07368-2\\_16](https://doi.org/10.1007/978-3-319-07368-2_16)
- Zajenkowski, M., Stolarski, M., Maciantowicz, O., Malesza, M., & Witowski, J. (2016a). Time to be smart: Uncovering a complex interplay between intelligence and time perspectives. *Intelligence*, 58, 1-9. <https://doi.org/10.1016/j.intell.2016.06.002>
- Zajenkowski, M., Stolarski, M., Witowska, J., Maciantowicz, O., & Lowicki. (2016b, November 22). Fluid intelligence as a mediator of the relationship between executive control and balanced time perspective. *Frontiers in Psychology*, 7, 1844. <https://doi.org/10.3389/fpsyg.2016.01844>
- Zaleski, Z. (1996, August). Future anxiety: Concept, measurement, and preliminary research. *Personality and individual differences*, 21(2), 165-174.  
[https://doi.org/10.1016/0191-8869\(96\)00070-0](https://doi.org/10.1016/0191-8869(96)00070-0)

- Zhang, J. W., & Howell, R. T. (2011). Do time perspectives predict unique variance in life satisfaction beyond personality traits? *Personality and Individual Differences*, 50(8), 1261-1266. <https://doi.org/10.1016/j.paid.2011.02.021>
- Zhang, J. W., Howell, R. T., & Bowerman, T. (2013). Validating a brief measure of the Zimbardo time perspective inventory. *Time and Society*, 22(3), 391-409. <https://doi.org/10.1177/0961463X12441174>
- Zhang, J. W., Howell, R. T., & Stolarski, M. (2013, March). Comparing three methods to measure a balanced time perspective: The relationship between a balanced time perspective and subjective well-being. *Journal of Happiness Studies*, 14(1), 169-184. <https://doi.org/10.1007/s10902-012-9322-x>
- Zhong, X. N., Li, X., Liu, T., & Chen, Y. W. (2016). The mediator role of psychological capital: A study among authentic leadership, work engagement, and psychological capital. *2016 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*. Bali. <https://doi.org/10.1109/ieem.2016.7798200>
- Zhou, H., & Fishbach, A. (2016). The pitfalls of experimenting on the web: How unattended selective attrition leads to surprising yet false research conclusions. *Journal of Personality and Social Psychology*, 111(4), 493-504. <https://doi.org/10.1037/pspa0000056>
- Zigarmi, D., & Nimon, K. (2011). A cognitive approach to work intention: The stuff that employee work passion is made of? *Advances in Developing Human Resources*, 13(4), 447-461. <https://doi.org/10.1177/1523422311431152>

- Zigarmi, D., Nimon, K., Houson, D., Witt, D., & Diehl, J. (2009). Beyond engagement: Toward a framework and operational definition for employee work passion. *Human Resource Development*, 8(3), 300-326.  
<https://doi.org/10.1177/1534484309338171>
- Zimbardo P. G., & Boyd, J. N. (2008). *The time paradox: The new psychology that will change your life*. Free Press.
- Zimbardo P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-difference metric. *Journal of Personality and Social Psychology*, 77(6), 1271-1288. <https://doi.org/10.1037/0022-3514.77.6.1271>
- Zimbardo P. G., & Sword, R. K. (2017). *Living and loving better with time perspective therapy*. McFarland & Company.
- Zimbardo P. G., Keough, K. A., & Boyd, J. N. (1997). Present time perspective as a predictor of risky driving. *Personality and Individual Differences*, 23(6), 1007-1023. [https://doi.org/10.1016/s0191-8869\(97\)00113-x](https://doi.org/10.1016/s0191-8869(97)00113-x)
- Zimbardo P. G., Sword, R., & Sword, R. (2012). *The time cure: Overcoming PTSD with the new psychology of time perspective therapy*. Jossey-Bass.
- Zimbardo P. G., Clements, N., & Leite, U. R. (2017). Time perspective and financial health: To improve financial health, traditional financial literacy skills are not sufficient. Understanding Your time perspective is critical. In A. Kostic, & D. Chadee (Eds.), *Time perspective: Theory and practice* (pp. 9-40). MacMillan Publishers. [https://doi.org/10.1057/978-1-137-60191-9\\_2](https://doi.org/10.1057/978-1-137-60191-9_2)



Zimbardo Z. M., McDermott, R., & P. Zimbardo P. G. (2017). In A. Kostic, & D. Chadee (Eds.), Time perspective: Theory and practice (pp. 41-62). MacMillan Publishers.

[https://doi.org/10.1057/978-1-137-60191-9\\_3](https://doi.org/10.1057/978-1-137-60191-9_3)