

Self-regulation and Emotional Resilience in the Workplace. A Systematic Review

Michael Sotiriadis, Michael Galanakis The American College of Greece, Athens, Greece

The current project provides a systemic literature review on the self-regulation theory analyzing the history, the main concepts, and an integrated model of analyzing the theory. Following, emotional resilience is described and linked with the self-regulation theory proving their connection, through emotional regulation. The literature review provides tangible resources for individuals to understand and apply in everyday life tactics that will assist them in fostering greater emotional resilience in the workplace, utilizing the self-regulation theory. Finally, a brief discussion is provided in terms of how to evaluate critically the concepts mentioned while limitations and future research are also indicated. This paper aims to invite conversation and collaboration in discovering a relatively new field that could in the future reimagine the workplace.

Keywords: self-regulation theory, emotional resilience, emotional regulation, emotionally resilient workplace, organizational psychology

Self-regulation Theory and Emotional Resilience in the Workplace: Fostering a Resilient Workforce

The field of personality has always been a topic highly important for psychologists and researchers alike. From the early works of Freud to the more contemporary Trait Activation Theory, psychologists believed in personality, and its influence in many different factors (Crocq, 2022). Bandura's exceptional work shifted once again the scientific community with his Social Learning Theory which posed the foundation for the Self-Regulation Theory in the late 20th and early 21st century (Baumeister et al., 2007). Today, behavioral self-regulation has become a central topic in general psychology as well as in fields such as neuropsychology, educational and organizational psychology (Zimmerman & Schunk, 2011). This systematic review will analyze the Self-Regulation Theory, emotional resilience, and the implications these concepts can have for individuals in the workplace.

The Self-regulation Theory

For starters, the self-regulation theory includes the process of reaching goals through guidance of one's thoughts, feelings, and behaviors (Bandura, 1991). Albert Bandura is considered by many researchers the father of the self-regulation theory. Bandura has made many contributions to the science of psychology with social

Michael Sotiriadis, MSc Organizational Psychologist, Master's Program in Organizational Psychology, The American College of Greece, Athens, Greece.

Michael Galanakis, Ph.D., Post Doc, Psychology Professor, Master's Program in Organizational Psychology, The American College of Greece, Athens, Greece.

cognitive theory and social learning theory being prime examples of his influence in the scientific community. In the 90s, Bandura started studying how individuals could possibly control their behavior through the process of "self-regulation". For Bandura (1991) the process contained three steps: self-observation, judgement, and selfresponse. During the self-observation stage an individual assesses their thoughts and feelings in order to accomplice a goal they have set in place. Through the second stage, judgement which involves comparison to previous attempts or standards set in place by others will result in the execution of a particular action (Bandura, 1991). Through the final stage, self-response will result in the individual praising or punishing for the outcome in meeting the standards set in place (Bandura, 1991). Following Bandura, an approach encompassed by stages was described by Baumeister and colleagues. Through this model the theory was described in four components of self-regulation. Standards of a certain behavior, motivation to meet the standards set in place, monitoring the situation and specific thoughts that might occur would result in breaking the standards and finally the willpower or the internal strength of an individual (Baumeister et al., 2007). Through this stage model, individuals could promptly solve problems, understand personal views, and find coping skills to issues (Baumeister et al., 1994). Adding to the theory is the concept of "ego depletion" a term coined from Roy Baumeister that examined how, when, an individual is experiencing low mental activity; ones' self-control and willpower is drained (Baumeister et al., 2007). This state is what Baumeister called being "ego depleted". Self-control for Baumeister's theory plays a crucial role. Researchers following Baumeister's finding have been easy to question the "ego depletion" theory. A recent study conducted in 2021 on more than 3,500 participants in 36 independent laboratories found that ego depletion is not as reliable as it was previously assumed, leading to much criticism in the scientific community (Vohs et al., 2021).

As a response to the criticism the "ego depletion" theory was gaining, Lord and his colleagues proposed that at the core of self-regulation theory lies the negative feedback loop, a function that relies on the notion that individuals set goals, compare their progress and if not reached they make modifications to their cognitions or behaviors (Lord, Diefendorff, Schmidt, & Hall, 2010). Individuals constantly must work through this negative loop. It is also important to note that through this approach, goals seem to be described in a hierarchical structure with short-term and long-term goals. This approach regards self-regulation as a structured process (Lord et al., 2010). In addition, Gollwitzer et al. (2008) identified multiple self-regulatory phases which all had as a core one's mindset. Gollwitzer described these mindsets as goal establishing (deliberative mindset), planning (implemental mindset), goal striving (actional mindset) and evaluation or revision of the goal (evaluative mindset). Gollwitzer's theory was highly backed up by research that indicated that goal-relevant information has easier access to working memory (Lord et al., 2010). Moreover, how an individual maintains goals might influence how well they acquire knowledge (Gollwitzer et al., 2008).

Self-regulatory processes through a neuroscientific point of view occur in the frontal lobes as goal structures are maintained there (Heatherton, 2011). Managing goal maintenance, attention, and knowledge are all states which derive from the frontal lobe and the midbrain from which self-regulation can be supported (Lord et al., 2010). With this in mind, self-regulation seems to be a concept that requires a multifaceted approach. Multiple systems are needed both physiologically and psychologically for one to understand the goal setting aspect of the self-regulation theory.

Applicability wise, the self-regulation theory seems that it immediately assists in separating long-term desires and impulses, by planning, and evaluating our actions by minimizing regret of specific actions. Additionally, an individual can take control and evaluate greater circumstances which can benefit one's learning

and behavior (Baumeister, 2007). Moreover, self-regulation seems to strengthen emotional wellbeing and become emotionally resilient (Artuch-Garde et al., 2017).

Emotional Resilience

The ability to adapt to change, difficulties, and disruption while keeping strong functional capacities is referred to as emotional resilience (Lloyd, Katz, & Pronk, 2016). Employees that when presented with stress can easily bounce back, cope without giving in, and bend without breaking are considered people with high emotional resilience (Grant & Kinman, 2013). Research states that emotional resilience is a skill that is taught and learned yet for it to improve it should be practiced in everyday life. Emotional resilience is considered an important quality for professionals since this could indicate individuals that can positively adapt to stressful situations, manage emotional demands, enhance professional growth, improve wellbeing, and foster effective coping strategies (Stephens, 2013). A research study conducted in 2012 by Grant and Kinman found that resilient employees are those that have developed reflective skills, flexible coping styles, effective work-life balance, social confidence, and a strong social support network. Moreover, workers that demonstrate "accurate empathy", build compassionate relationships with others without becoming emotionally over-loaded and distressed (Grant & Kinman, 2014).

Emotional resilience comprises of four factors that could guide an individual to become more resilient. Reflective ability can help foster many of the competencies mentioned previously. Accurate empathy and emotional literacy are concepts supported through well-developed reflective abilities (Grant, 2013). Emotional resilience could potentially be enhanced through reflective ability tactics (Grant & Kinman, 2014). The second component of emotional resilience is emotional intelligence. Emotional intelligence is the ability to motivate oneself and the ability to control impulses as well as regulation of one's mood (Grant & Kinman, 2014). Additionally, emotional intelligence assists employees to manage their own emotional reactions and recognize the impact of their emotional states on potential decision-making processes or problem-solving abilities (Howe, 2008). People with high emotional intelligence have been found to be more optimistic, socially confident, have superior decision-making and problem-solving skills, as well as be more psychologically flexible (Grant & Kinman, 2014).

Social confidence is considered the third component of an emotionally resilient individual. Assertiveness, conflict resolution skills, and developed communication skills are essential for employees in any sector and are all considered aspects of emotional resilience and social confidence in the working environment (McDonald et al., 2012). Confidence in social settings has been found to improve the quality of working relationships and guide people to make more effective social support networks (Montes-Berges & Augusto, 2007). The final aspect of an emotionally resilient individual is social support. Research dating back to the 80s has indicated that individuals that have more supportive relationships tend to experience less stress and are generally healthier (Grant & Kinman, 2014). Feelings of connectedness and empathy could also be supported through social support. While a lack of it could create feelings of alienation, anxiety, burnout, and depression (Li et al., 2012). Commitment to a job and better retention have been correlated with social support (Clements et al., 2013). Moreover, a supportive workplace can combat burnout and emotional fatigue (Grant & Kinman, 2014). Generally, social support increases employee satisfaction and encourages individuals to be more productive leading to a more satisfied and emotionally resilient work environment (Grant & Kinman, 2014). Pahwa and Khan (2022) in their model of emotional resilience believed that self-awareness, emotional regulation, self-efficacy, problem solving, social

support and relationships, positive thinking, physical health, and meaning were all indications of an emotionally resilient individual, components found in theories previously mentioned.

Implications in Fostering Emotional Resilience Through the Self-regulation Theory at Work

Research in recent times has tried to incorporate aspects of self-regulation and emotional resilience. In fact, self-regulatory skills are for the most part synonymous with executive function capacities that involve emotional regulation (Posner & Rothbart, 2000). Emotional resilience has been mostly studied in children yet could provide informative concepts and perspectives that could assist researchers in understanding emotional resilience in the workplace (Rothstein, McLarnon, & King, 2016). In its definition emotional resiliency includes the selfregulation of emotions amidst other variables. More generally, the concept of resilience is an adaptational process that includes regulation of emotion, behavior, motivation, and other self-regulatory functions mentioned before (Masten, 2001). Self-regulation processes in the model of resiliency evokes the mechanisms of controlling emotions, behaviors, and thoughts in order to experience less distress whilst gaining self-efficacy (King & Rothstein, 2010). Merrell Felver-Gant, and Tom in 2011 purposed in the Social-Emotional Assets and Resilience Scale that self-regulation is a crucial factor impacting emotional resilience. Additionally, another scale that has indicated the effects of self-regulation and emotional resilience is the Workplace Resiliency Inventory (WRI) which measures affective, cognitive, and behavioral self-regulatory processes. The WRI has showcased good psychometric properties with significant relations with well-being (Rothstein et al., 2016). Researchers have purposed that individuals that are capable of regulating their emotions, are able to cope with stress, manage negative emotions like guilt, shame, anger, and sadness are emotionally resilient (Rothstein et al., 2016). Another study conducted in 2016 found that having the ability to accurately access, perceive, and regulate emotions could possibly help in developing some self-regulatory processes that might enable people to better cope with stressful circumstances in the workplace (Magnano, Craparo, & Paolillo, 2015).

For organizations to provide resources in order for their employees to become more emotionally resilient, the self-regulation theory could be directly utilized (Rothstein et al., 2016). Across the globe there are many different programs that could assist individuals wanting to improve their emotional resilience. Self-help resources and guided learning programs such as "Beating the Blues" have been offered for many years in the UK from the NHS (Lloyd et al., 2016). This program focuses on dealing with stressors and describing circumstances while acknowledging emotions. By understanding our mental and physical state individuals regulate and function through achieving resilience (Lloyd et al., 2016). Organizations could also rely on the "Health Assured" program that offers training courses involving the fostering of emotional resilience using as a principle the self-regulation theory (Health Assured, 2021). Through this program employees and managers alike can build emotional resilience in the workplace which would assist in coping with stress, managing negative emotions, and fostering general well-being (Health Assured, 2021). Another study suggests interventions could be set in place for employees to enhance their emotional resilience (Grant & Kinman, 2014). Trainings regarding the matter will assist employees in requiring knowledge on emotional literacy, empathy, reflective learning, and self-awareness (Grant & Kinman, 2012).

Practicing mindfulness, an emerging practice at least in the western world seems to provide evidence that it could possibly assist in managing work-related stress (Grant & Kinman, 2014). Mindfulness skills appear to provoke competencies such as accurate empathy, emotional intelligence, and reflective ability (Foureur et al.,

2013). Mindfulness Based Stress Reduction (MBSR), a technique firstly developed by Kabat-Zinn has also been associated with enhancing emotional resilience, empathetic self-awareness, and self-compassion in multidisciplinary professionals (Shapiro, Brown, & Biegel, 2007). Experiential learning could also enhance competencies affiliated with emotional resilience. Role plays, case studies, and simulation practice could improve emotional intelligence, emotion regulation, and empathy (Foster & McKenzie, 2012). Moreover, workplace learning can enhance emotion management skills which as a result could facilitate better decision-making and problem-solving (Grant & Kinman, 2014).

Discussion

The current paper focused on examining the self-regulation theory and how it could assist emotional resilience to be fostered in the workplace. For starters, the self-regulation theory has been established through the works of Bandura. He has laid the foundations through his research in the field of psychology. The process he has proposed contains three steps: self-observation, judgement, and self-response (Bandura, 1991). The current paper argued and pinpointed the reasons scientists needed to further establish the theory. Baumeister implied a different interpretation than that of Bandura whilst utilizing his colleague's initial work (Baumeister et al., 2007). Until recently Baumeister's theory was the prominent model in explaining the self-regulation construct, yet recent articles have shown that the "ego-depletion" concept is not as reliable as previously thought leaving to question Baumeister's theory (Vohs et al., 2021). Lord and colleagues have given a different viewpoint to the self-regulation theory proposing the negative feedback loop (Lord et al., 2010). The negative feedback loop is supported through multiple studies that have closely examined the theory. Research has indicated the importance of Lord's theory in the medical field where medical staff have successfully used it to assist patients (Inzlicht, Werner, Briskin, & Roberts, 2020).

The self-regulation theory has been interpreted in various ways with researchers focusing on multiple aspects that all concisely create an integrated model (Inzlicht et al., 2020). Through the theory, goals were more practically defined and gave rise to more research looking into concepts such as long-term and short-term goals. Recently, the field of neuroscience has given great evidence regarding the goal-setting aspect of the self-regulation theory (Heatherton, 2011). Researchers have found that goal-setting processes are maintained in the frontal lobe while goal maintenance and attention are mostly fostered in the midbrain (Woltering & Shi, 2016). These findings are crucial for the field of psychology as well as the self-regulation theory since it showcases the biological element to the theory. One might conclude through these findings that humans have an innate biological component to assist in the application of self-regulation through goal setting (Lord et al., 2010).

Moreover, the paper has highlighted the importance of emotional resilience and the concept of emotional regulation through the self-regulation theory. Emotional resilience is a term mostly researched in the field of developmental and child psychology yet recently studies are shifting their focus in providing the self-regulation theory to assist in fostering emotional resilience in the workplace (Zimmerman & Schunk, 2011). Studies have found that, less distress is experienced when one controls emotions, behaviors, and thoughts whilst simultaneously gaining self-efficacy (Grant & Kinman, 2014). Furthermore, trainings focusing on emotional resilience through self-regulation, require gaining knowledge on emotional literacy, empathy, and self-awareness (Grant & Kinman, 2012). Meditation, role plays, and simulations could also improve emotional intelligence, emotion regulation, and empathy based on a study done by Foster and McKenzie (2012).

Through the self-regulation theory individuals can actively practice emotional resilience. Consciously breathing and relaxing, exercising and meditation could all assist with not only physical self-regulation but also with experiencing negative emotions and work-related stress (Wilms, Lanwehr, & Kastenmüller, 2020). Additionally, the theory guides individuals to separate long-term desires and impulses, by planning, and evaluating actions (Baumeister, 2007). Moreover, an individual can take control and evaluate greater circumstances which can benefit one's learning and behavior (Baumeister, 2007). The aforementioned findings clearly indicate the positive implications the self-regulation theory has on emotional resilience in the workplace (Wilms et al., 2020). Following the practical suggestions, one could enhance their cognitive, psychological, and physical state while fostering greater general wellbeing which has a direct link to workplace satisfaction and happiness.

Limitations and Future Research

The Self-regulation Theory has provided concrete evidence on how fundamental it is in the modern workplace yet more research is needed to facilitate the model especially regarding "ego depletion" (Carter et al., 2015). Research should additionally provide longitudinal studies regarding emotional resilience and how organizations can become long-term emotionally resilient. Moreover, sustainable emotional resilience strategies need to be enhanced and should focus on all stages of a professional's development (Grant & Kinman, 2014). Finally, future researchers should focus on providing a multidimensional and interdisciplinary model that could utilize the self-regulation processes across multiple complex contexts (Lord et al., 2010).

Conclusion

To conclude, a brief introduction of the main facilitators of the self-regulation theory was provided. Bandura's social learning theory gave a steppingstone for the self-regulation theory to flourish. Baumeister excelled the theory with many other researchers setting their own interpretation. Despite criticism the theory has supporting findings and has established itself as a prominent theory in psychology today. Emotional resilience was later defined and showcased in how truly the concept is interconnected with the self-regulating theory. Implications in how the theory can be utilized by organizations to help foster a more emotionally resilient work environment demonstrated the direct link between the concepts. Organizations through self-help and organized interventions, practicing mindfulness and experiential learning can assist employees in becoming more emotionally resilient through utilizing tactics found in the self-regulation theory. Lastly, limitations such as the concept of "ego depletion" were discussed and future research should focus on providing answers to such ideas as well as focus on providing more long-term and multidisciplinary strategies that can be accessed by organizations across the globe.

References

- Artuch-Garde, R., González-Torres, M. D. C., de La Fuente, J., Vera, M. M., Fernández-Cabezas, M., & López-García, M. (2017). Relationship between resilience and self-regulation: A study of Spanish youth at risk of social exclusion. *Frontiers in psychology*, 8, 612.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248-287.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). Losing control: How and why people fail at self-regulation. San Diego, CA: Academic Press.

- Baumeister, R. F., Schmeichel, B. J., & Vohs, K. D. (2007). Self-regulation and the executive function: The self as controlling agent. *Social Psychology: Handbook of Basic Principles*, *2*, 516-539.
- Carter, E. C., Kofler, L. M., Forster, D. E., & McCullough, M. E. (2015). A series of meta-analytic tests of the depletion effect: Self-control does not seem to rely on a limited resource. *Exp. Psychol. Gen.*, 144(4), 796-815. doi:10.1037/xge0000083
- Crocq, M. A. (2022). Milestones in the history of personality disorders. Dialogues in Clinical Neuroscience, 1, 35-37.
- Foster, K., & McKenzie, H. (2012). Educational approaches to enhance emotional intelligence. *Emotional Intelligence in Health and Social Care: A Guide for Improving Human Relationships*, 55, 65-70.
- Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of nurses and midwives: Pilot of a mindfulness-based program for increased health, sense of coherence and decreased depression, anxiety, and stress. *Contemporary Nurse*, 45(1), 114-125.
- Gollwitzer, P. M., Parks-Stamm, E. J., Jaudas, A., & Sheeran, P. (2008). Flexible tenacity in goal pursuit. In *Handbook of motivational science* (pp. 325-341). New York: Guilford Press.
- Grant, L., & Kinman, G. (2012). Enhancing wellbeing in social work students: Building resilience in the next generation. *Social Work Education: The International Journal*, 31(5), 605-621.
- Grant, L., & Kinman, G. (2013). Bouncing back? Personal representations of resilience of student and experienced social workers. *Practice: Social Work in Action*, 25(5), 349-366. doi:10.1080/09503153.2013.860092
- Grant, L., & Kinman, G. (2014). Emotional resilience in the helping professions and how it can be enhanced. *Health and Social Care Education*, 3(1), 23-34.
- Heatherton, T. F. (2011). Neuroscience of self and self-regulation. Annual Review of Psychology, 62, 363.
- Inzlicht, M., Werner, K. M., Briskin, J., & Roberts, B. (2020). Integrating models of self-regulation. Annu. Rev. Psychol., 1, 1-17.
- King, G. A., & Rothstein, M. G. (2010). Resilience and leadership: The self-management of failure. In *Self-Management and leadership development* (pp. 361-394). Cheltenham: Edward Elgar Publishing.
- Li, P., Jiajia, Z., Min, L., Peipei, L., Yu, Z., Xin, Z. and Ying, X. (2012) Negative life events and mental health of Chinese medical students: the effect of resilience, personality and social support. Psychiatry Research 196, 138–141.
- Lloyd, K. D., Katz, A. S., & Pronk, N. P. (2016). Building emotional resilience at the workplace: A health partners case study. *ACSM's Health & Fitness Journal*, 20(1), 42-46.
- Lord, R. G., Diefendorff, J. M., Schmidt, A. M., & Hall, R. J. (2010). Self-regulation at work. *Annual Review of Psychology*, 61(1), 543-568.
- Magnano, P., Craparo, G., & Paolillo, A. (2016). Resilience and emotional intelligence: Which role in achievement motivation. *International Journal of Psychological Research*, 9(1), 9-20.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 227-239. doi:10.1037/0003-066X.56.3.227
- McDonald, G., Jackson, D., Wilkes, L., & Vickers, M. H. (2012). A work-based educational intervention to support the development of personal resilience in nurses and midwives. *Nurse education today*, 32(4), 378-384.
- Merrell, K. W., Felver-Gant, J. C., & Tom, K. M. (2011). Development and validation of a parent report measure for assessing social-emotional competencies of children and adolescents. *Journal of Child and Family Studies*, 20(4), 529-540. Retrieved from https://doi.org/10.1007/s10826-010-9425-0
- Montes-Berges, B., & Augusto, J. M. (2007). Exploring the relationship between perceived emotional intelligence, coping, social support and mental health in nursing students. *Journal of psychiatric and mental health nursing*, 14(2), 163-171.
- Pahwa, S., & Khan, N. (2022). Factors affecting emotional resilience in adults. Management and Labour Studies, 47(2), 216-232.
- Posner, M. I., & Rothbart, M. K. (2000). Developing mechanisms of self-regulation. *Development and Psychopathology*, 12, 427-441.
- Rothstein, M. G., McLarnon, M. J., & King, G. (2016). The role of self-regulation in workplace resiliency. *Industrial and Organizational Psychology*, 9(2), 416-421.
- Shapiro, S. L., Brown, K., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology*, 1(2), 105-115.
- Stephens, T. (2013). Nursing student resilience: A concept clarification. Nursing Forum, 48(2), 125-133.
- Vohs, K. D., Schmeichel, B. J., Lohmann, S., Gronau, Q. F., Finley, A. J., Ainsworth, S. E., ... & Albarracín, D. (2021). A multisite preregistered paradigmatic test of the ego-depletion effect. *Psychological Science*, 32(10), 1566-1581.
- Wilms, R., Lanwehr, R., & Kastenmüller, A. (2020). Emotion regulation in everyday life: The role of goals and situational factors. *Frontiers in Psychology*, 11, 877.

Woltering, S., & Shi, Q. (2016). On the neuroscience of self-regulation in children with disruptive behavior problems: Implications for education. *Review of Educational Research*, 86(4), 1085-1110.

Zimmerman, B. J., & Schunk, D. H. (2011). *Handbook of self-regulation of learning and performance*. New York: Routledge/Taylor & Francis Group.