

Understanding Practical Emotions: Bridging Affect and Action

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Abstract

Emotions are a fundamental part of our lives. Emotions and cognition are closely interlinked and work together to generate adaptive responses. Emotions play a vital role in determining how we perform our daily tasks, preserve and organize our memory, and make decisions. This paper focuses on “practical emotions,” which are based on subjective experiences influencing practical decision-making and adaptive actions. A subjective experience is developed resulting from the cognitive and the emotional impacts of the individual experience as compared to objective experiences are based on actual events. A narrative review approach was employed to investigate the mechanisms and impacts of practical emotions. This paper encompassed a comprehensive overview of the conceptual framework of practical emotions, the current state of research, the physiological and psychological underpinnings of emotions, and their applications in various domains, and challenges. By reviewing literature and recent findings, this paper aims to broaden the understanding of practical emotions as functional components integral to human behavior and societal development.

Keywords

Practical emotions, Emotions, Mental health, AI, Physiology, Ethics, Social, Subjective.

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Introduction

Emotions are considered central to the human experience [1]. However, beyond merely reflecting internal states, emotions play a crucial functional role in guiding adaptive behaviors and decision-making processes. Emotions are defined as experiences in the form of biological responses resulting from external stimuli, causing physical and psychological changes followed by unique actions [2]. Emotions including joy, fear, happiness, sadness, anger, shame, gratitude, disgust, surprise, and a lot more, all create and shape the core of the human experience (Figure 1). They influence human perception, cognition, and interaction [3]. Practical emotions are usually the emotions that allow an individual to properly function and make reasonable decisions. Practical emotions perform a dual role by acting as catalysts for reasoned action as well as generating adaptive responses to real-world challenges [4].

Practical emotions serve as internal signals that help individuals navigate complex social environments, assess risks and rewards, and respond appropriately to various situations. These signals arise from complex interactions between the brain, hormones, and the nervous system, influencing behavior and decision-making. They encompass a range of affective experiences that prompt individuals to take actions beneficial for survival, social cohesion, and personal well-being. For instance, fear can prompt avoidance of danger by activating the fight-and-flight mode of the body [6], while empathy can create social bonds and cooperation [7]. These emotions are not merely reactive; they are proactive tools for decision-making and adaptation. Practical emotions are further responsive to situational contexts, allowing for flexible and appropriate behavioral responses. For example, if someone is yelled at work, it will generate a cascade of emotions including fear and anger as a primary emotion, accompanied by feelings of shame

and resentment as secondary emotions [7]. In this case, the role of the practical emotions will be to generate internal signals focusing on tackling the situation reasonably by staying calm. Furthermore, Internal signals tied to the brain's reward pathways (such as the dopamine system) can guide individuals toward actions that lead to pleasurable outcomes, like social approval or material gain. The brain also processes social and moral cues, helping individuals decide whether an action is acceptable within their social group [8].

Practical emotions also drive functional and goal-oriented actions that are pivotal in navigating complex social and environmental challenges. Despite their importance, many ethicists do not pay heed to the fundamental role of emotions in the decision-making and reflection process [9]. Emotions are either subjective or irrational. According to Kant, while human beings are considered rational beings capable of making rational decisions, emotions act as blind forces that can obstruct rational decision-making and the wisdom of humans. Only a person who has the ability to develop a strong will can control their emotions and make reasonable decisions in life [10].

This paper explores the concept of “practical emotions,” emphasizing how they emerge from different experiences and guide individuals toward effective responses in various contexts. The paper aims to delve into the conceptual framework of practical emotions, examining their physiological and psychological foundations, and exploring their applications in fields such as education, healthcare, social relationships, artificial intelligence, and organizational behavior. Through an analysis of emotional reactions in diverse scenarios, this study aims to deepen the understanding of how practical emotions influence decision-making and adaptive responses, ultimately promoting survival and well-being.

Methodology

To comprehensively investigate practical emotions, a narrative review approach was adopted. The eligibility criteria for selecting papers involved the incorporation of papers published in conferences, peer-reviewed articles, academic journals, and renowned databases. The aim was to review maximum papers highlighting the basic understanding, conceptual framework, and, applications of emotions in various domains of life. Various papers like duplicates, non-English, or irrelevant to the topic

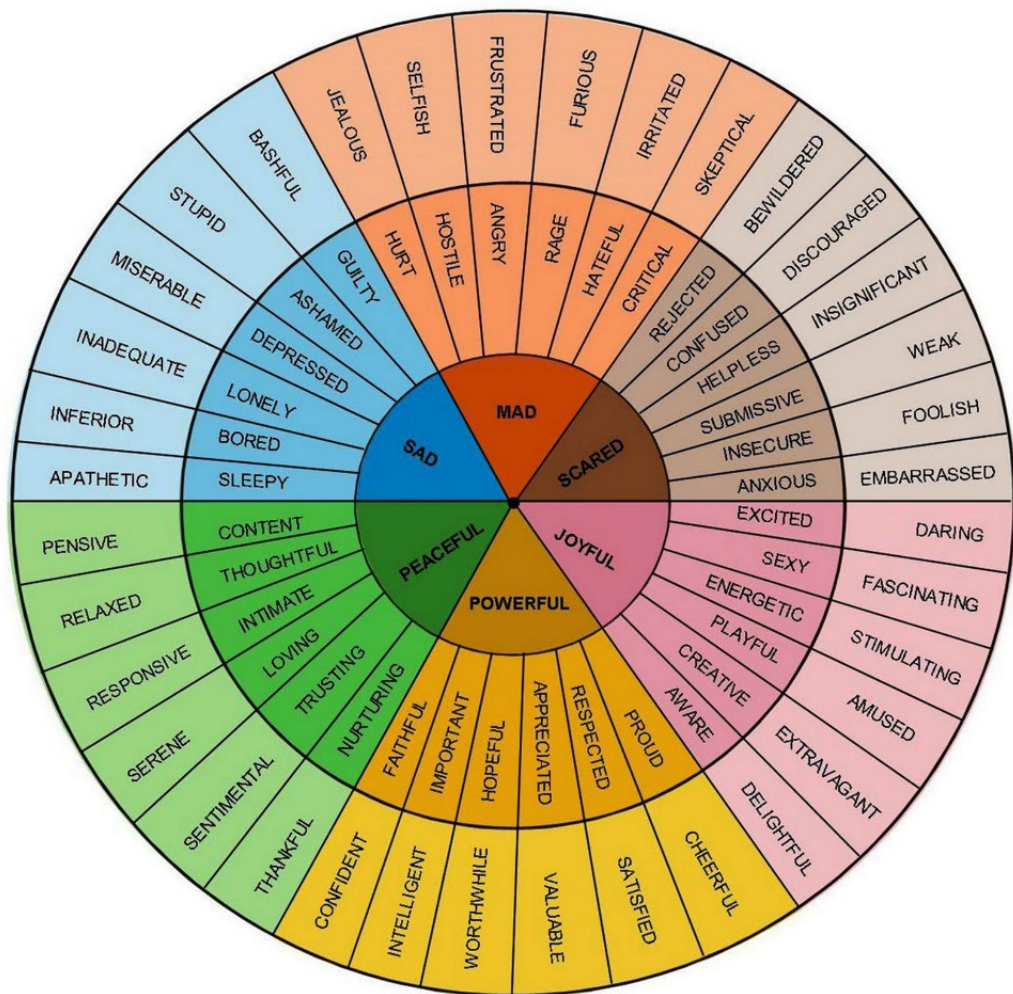


Figure 1: Emotions [11].

were excluded from the inclusion criteria. The screening process mainly consisted of two stages: reading the abstract and assessing full-text criteria to extract maximum relevant information. The search strategy was based on identifying papers published in the years between 2000 to 2025. A total of 80 articles were selected that meet the inclusion criteria. These articles were further studied and analyzed to extract key information related to practical emotions. The selection process was further extended to review the literature for adding more pertinent information, examples, trends, challenges, and ethical considerations.

Conceptual Framework

Practical emotions involve a vital interplay between emotional experiences and cognitive processes, influencing decision-making and problem-solving [12]. While traditional emotional theories focus on internal experiences and expressions, practical emotions emphasize the intentional and outcome-oriented aspects of emotions [13]. Practical emotions are context-specific, influenced by environmental cues, cultural norms, and individual differences. Several theoretical models provide insights into the nature and function of practical emotions:

According to the theory of constructed emotions proposed by Lisa Feldman Barrett, emotions are not innate or discrete entities but are constructed at the moment through the integration of core affective states and conceptual knowledge. According to this view, the brain uses past experiences and cultural concepts to interpret sensory input and generate emotional responses, allowing for flexible and context-dependent emotional experiences [14]. Another theory known as the Emotion-Cognition interaction framework emphasizes the bidirectional relationship between emotional and cognitive processes. Emotions can influence attention, memory, and decision-making, while cognitive appraisals can modulate emotional experiences. Understanding this interaction is crucial for comprehending how practical emotions guide adaptive behavior [15].

Many previous theories have propounded that emotions are formed by the physiological processes in our body causing complex interactions between the brain and neurochemical systems. According to the James-Lange theory, it emphasizes the physiological basis of emotions, suggesting that bodily responses precede emotional experiences. The theory posits that the body initially reacts to the stimulus, and then the brain reacts to the physiological change by forming an emotion [16]. Different physiological responses generated by the body are perspiration, muscular tension, increased heart rate, and dry mouth [17]. In contrast to the James-Lange theory, the Schachter-Singer two-factor theory highlights the interaction between physiological arousal and cognitive appraisal in generating emotions [18].

EFO (Emotion Frame Ontology) treats emotions as semantic frames with specific roles that capture different aspects of emotional experiences. This ontology provides a structured approach to modeling emotions, facilitating the analysis of how various components of emotions contribute to practical outcomes [19]. In the context of practical emotions, EFO offers a valuable tool for understanding how emotions function to facilitate adaptive, and goal-directed behaviors. By treating emotions as frames, EFO allows for the decomposition of emotional experiences into constituent components, such as the eliciting situation, the

emotional response, and the resulting action tendencies [20]. This structured representation aids in analyzing how specific emotions contribute to practical outcomes. For example, consider the emotion of fear. Within EFO, fear can be modeled with roles that include the triggering event (e.g., encountering a predator), the physiological and psychological responses (e.g., increased heart rate, feelings of dread), and the adaptive actions prompted by the emotion (e.g., fleeing or freezing). By mapping these components, EFO elucidates how fear operates as a practical emotion, guiding behavior in ways that enhance survival [21].

Psychophysiological Underpinnings

Emotions have always played a unique role in the survival of human evolution. An exploration of the physiological and psychological bases is compulsory to understand the science behind practical emotions. Physiologically, emotions are complicated programs of action formed by the biochemical processes occurring in the complex neural circuits of the brain triggered by the outer stimulus [22]. The limbic system plays a pivotal role in emotional processing. The key structures include the amygdala, prefrontal Cortex, and insular cortex [24]. The amygdala is critical for detecting emotional salience, while the prefrontal cortex regulates emotional responses and integrates them with cognitive processes [24]. The insular cortex, on the other hand, mediates the subjective experience of emotions and their visceral components [25]. Furthermore, these regions work in concert to evaluate stimuli and coordinate appropriate emotional responses.

Different neurotransmitters like dopamine (associated with pleasure), serotonin (regulates mood), and, oxytocin (enhances bonding) significantly impact and modulate the emotional states of a person [26]. For instance, the release of cortisol during stress prepares the body for a 'fight or flight' response (Galvano), while dopamine is associated with reward-based learning and goal-directed behavior, making it a cornerstone of practical emotions [27]. These physiological changes are integral to how humans experience emotions and prepare them for adaptive actions.

Psychologically, emotions are connected with cognitive appraisals, past experiences, personal thoughts, individual differences, and cultural norms that shape how emotions are experienced and expressed [28]. In terms of cognitive appraisals, the interpretation of events influences one's emotional reactions. For example, viewing a challenging situation as a threat may induce anxiety while seeing it as an opportunity may lead to excitement. The presence of individual differences such as temperament and resilience among humans affect how they experience and respond to emotions. For example, some people may have a predisposition towards optimism, influencing their emotional responses to adversity. The person's ability to recognize, understand, and manage his own emotions, as well as empathize with others, is crucial for effective interpersonal interactions and personal well-being.

Application of Practical Emotions

Practical emotions, encompassing the ability to perceive, understand, and manage emotions, have significant applications across various domains.

Education & Learning

Emotions are feelings that we experience on different occasions

and can be intense and directed. Teaching is often described as an emotional profession. Teachers feel so many emotions while interacting with students and colleagues, appraising teaching events, and being a part of the educational system. Teachers can either feel positive, negative, or mixed emotions in different situations. Each discrete emotion is followed by a unique feeling and action, so it is quite important for teachers to regulate their emotions in order to present their best version to the students [29]. This is because teachers' emotions significantly impact classroom dynamics and student outcomes. Positive emotions from teachers can harness a supportive classroom climate, create good relationships, and enhance educational results. Conversely, negative emotions may hinder learning and student engagement [30]. For example, a smile can evoke positive reactions and promote trust, while expressions of anger can assert dominance or signal disapproval [31]. Therefore, educators' awareness and regulation of their emotions are vital for effective teaching.

Teachers can employ various strategies to manage emotions within the classroom. For example, identifying personal stress responses and practicing mindfulness can help teachers maintain composure and respond effectively to challenging situations. Such practices not only enhance self-awareness, and are good for teachers' well-being but also model emotional regulation for students, contributing to a positive learning environment [32]. Teachers with high EI (emotional intelligence) can create emotionally supportive environments, and increase student engagement and resilience. Emotional intelligence (EI) is defined as the ability to perceive, understand, and manage emotions (Figure 2). EI plays a crucial role in determining these reactions. High EI individuals are better equipped to harness practical emotions for effective decision-making and problem-solving. Furthermore, encouraging mindfulness and emotional regulation among students promotes better academic outcomes and interpersonal skills.

Emotions are deeply linked with students' motivation and engagement levels. Positive emotional states can create a conducive learning environment, leading to improved academic performance. A study conducted by Edouard et al., [33] collected and analyzed data related to student's emotions during learning at a French engineering school. He found that positive emotions correlated with better academic outcomes, highlighting the importance of emotional engagement in learning.

In educational settings, practical emotions are instrumental in enhancing learning and social development. Schools are considered a starting point for the social and emotional development of the children. Implementing SEL (Social and Emotional Learning) programs in schools has been shown to improve students' social dynamics and academic performance. SEL fosters empathy and compassion, which are imperative for a successful school environment that effectively supports the mental well-being of staff and students [34]. Many previous studies have shown that programs such as SPARK have been successful tools for schools with diverse populations to introduce and encourage SEL skills [35-37].

Technology & Artificial Intelligence

Emotions have always been observed as a unique human ability, but in recent years, Artificial intelligence (AI) has emerged as an

interesting option for the incorporation of emotional intelligence into machines. AI is rapidly evolving, moving beyond logical computations to understanding and responding to human emotions. The integration of AI into practical emotions can revolutionize human-computer interactions. Several computing techniques and natural language processing machines are now being experimented at an extensive scale to detect and analyze human emotions [38]. The incorporation of practical emotions in AI can be utilized to simulate human-like decision-making, especially in uncertain or complex scenarios. By integrating affective computing and reinforcement learning, AI can prioritize tasks based on emotional and contextual cues, leading to more adaptive, improved, and human-centric solutions [39].



Figure 2: Emotional Intelligence.

The use of AI for understanding emotions can significantly improve user experience in applications such as virtual assistants, chatbots, and customer service platforms [40]. Emotionally intelligent AI can adapt to users' emotional states through voice, text, or facial expressions and respond appropriately, providing personalized and empathetic responses [41]. In robotics, practical emotions enable AI-powered robots to interact naturally with humans, particularly in caregiving, education, and customer service. Emotionally intelligent robots can foster trust, companionship, and personalized assistance, making them more effective in human-centered roles [42]. Moreover, integrating AI into understanding human emotions can revolutionize the mental healthcare system by offering advanced therapeutic platforms, rapid detection methods, and tailored virtual therapies [43]. AI-driven mental health tools including therapy chatbots and diagnostic tools like Woebot, Wysa, and Replika that recognize and respond to emotional cues can offer effective support and intervention [44-46].

Healthcare System

In the mental healthcare system, understanding emotions and human behavior is a paramount task. Many healthcare systems are striving for more multi-dimensional patient-centered care.

Individuals suffering from mental health issues often find it difficult to channel their emotions in the right direction. Emotional intelligence helps doctors and nurses provide compassionate care, improving patient trust and adherence to treatment [47]. Effective communication within healthcare teams is crucial for patient safety. Teams with high collective EI can “read” each other more effectively, reducing miscommunication and the likelihood of adverse events [48]. This empathetic approach leads to improved patient satisfaction and adherence to treatment plans. Birks & Watt [49], in their review have highlighted the positive correlation between EI and patient-centered outcomes, emphasizing the importance of healthcare providers’ ability to manage their own emotions and recognize patients’ emotions.

Healthcare environments are often high-stress settings. Burnout is a widely spreading health condition among healthcare professionals. This condition is characterized by depersonalization, mental exhaustion, stress, and emotional deprivation. While emotional regulation is described as the ability to modulate emotions in order to achieve desirable outcomes. Professionals with strong emotional regulation skills are better at managing stress, leading to reduced burnout and improved job satisfaction. In therapy, practitioners with high EI can build stronger therapeutic alliances by recognizing and responding to clients’ emotional states. This attunement promotes trust and facilitates more effective interventions [50].

Leadership & Organizational Behavior

Humans are a buildup of their emotions. Every action they perform, every thought that comes into their minds, their behavior and personality, all are wound up to what they feel. Ultimately, one major thing that an individual comes up with in the organization or workplace is his emotions. So, studying emotions and how these emotions can be used to increase performance, and productivity of any organization is a critical factor at any workplace. To create a more harmonious work environment, recognizing and leveraging practical emotions is a game-changer at the organizational level [2]. A deep understanding of emotions can improve team dynamics and leadership strategies. Emotions such as trust and commitment are foundational for building strong organizations, productivity, and innovation [51].

Emotions significantly influence organizational behavior, affecting various aspects such as decision-making, creativity, leadership, and interpersonal relationships. In organizations, practical emotions are crucial for leadership, better communication, teamwork, and conflict resolution [52]. Leaders with high EI inspire trust, manage stress effectively, and create a positive workplace culture leading to better performance and a high job satisfaction rate among employees [53]. For example, anger, when navigated constructively, can motivate leaders to address injustices or overcome obstacles. Conversely, mismanaged anger can lead to impulsive decisions and adverse outcomes. Similarly, fear can promote caution and risk assessment but may also lead to avoidance behaviors if not regulated [54].

The ability to regulate emotions is essential in maintaining professionalism and productivity. Emotions play a crucial role in shaping an individual’s beliefs about their job and organization. Positive emotions can enhance problem-solving abilities and

creativity, leading to innovative solutions. Conversely, negative emotions may hinder decision-making processes and reduce creative output [55]. Employees who can manage their emotional responses are better equipped to handle stress, collaborate with colleagues, and contribute positively to the organizational culture. Emotional regulation also helps in preventing workplace deviance and promoting organizational citizenship behaviors [56].

Organizations can implement training programs focused on developing emotional intelligence skills among employees [57]. Such programs may include mindfulness practices, emotional literacy workshops, and stress management techniques. By creating an environment that values and develops emotional competencies, organizations can enhance overall performance and employee well-being [58].

Social Relationships

Managing one’s emotions, known as emotion regulation, is crucial in maintaining social harmony. Practical emotions play a crucial role in social relationships by helping individuals navigate interactions effectively, build trust, and maintain harmony. Unlike impulsive emotions, practical emotions involve a level of self-regulation and strategic expression to achieve positive social outcomes [59]. Effective emotion regulation strategies, such as reappraisal (changing one’s interpretation of a situation) and suppression (inhibiting emotional responses), can influence decision-making in social interactions. For example, reappraisal can lead to more constructive responses during conflicts, thereby preserving relationships [60].

Emotions serve vital social functions by providing information about individuals’ intentions and relational dynamics. For instance, displaying anger can signal that one’s boundaries have been crossed, prompting others to adjust their behavior. Similarly, expressions of gratitude can reinforce positive social interactions and encourage prosocial behavior [61]. Emotions play a crucial role in conveying valuable information in social interactions, and rapidly coordinating group behavior even without explicit verbal communication. Expressing emotions serves as a fundamental mode of non-verbal communication, conveying feelings, intentions, and needs to others. For example, a smile can signal friendliness, while a frown may indicate disapproval [62]. These expressions help individuals interpret social cues and respond appropriately, facilitating smoother interactions. Expressing emotions can have significant effects on individuals’ well-being and their relationships, depending on how and with whom the emotions are shared [63]. Selective emotional expression can aid in managing one’s emotions and understanding personal experiences.

Beyond managing one’s own emotions, individuals often engage in interpersonal emotion regulation, which involves influencing the emotional states of others. When individuals feel empathetic, they also want to bolster the well-being of others. This can include comforting a distressed friend or sharing excitement with a partner [64]. Such practices strengthen social bonds and enhance mutual understanding. Interpersonal emotion regulation is a deliberate process where individuals aim to change the feelings of others, playing a significant role in social interactions and relationships [65].

Challenges and Future Directions

The interest in understanding the true nature of human emotions is progressively rising, with researchers using machines and AI to interpret the psychology behind emotions. Despite their ever-increasing significance, practical emotions pose challenges in understanding and application. Deciphering the exact meaning behind every emotion remains inherently a complex task due to its subjective nature [66]. Many traditional self-report methods are prone to several biases, as people may misinterpret or misrepresent their emotional states [67]. Furthermore, different personal factors such as temperament, past experiences, and personality traits significantly influence emotional processing [68]. These individual differences make it challenging to create standardized approaches to apply practical emotions in educational, organizational, and technological settings. As the interventions are tailored to accommodate individual variability is essential, but it adds complexity to program design and implementation [69].

One of the challenges in understanding and quantifying emotions is that emotional expressions and interpretations vary widely across cultures. It complicates the development of universal models of practical emotions [70]. For example, a facial expression denoting happiness in one culture might be interpreted differently in another. These cultural differences pose challenges for cross-cultural communication and the implementation of emotional intelligence programs, necessitating culturally sensitive approaches in both research and application [71].

Human emotional response is characterized by an individual's ability to perceive the significance of a specific event, followed by eliciting a physiological and behavioral response to it. Considerable progress has been made in the past few years in using physiology sensors to translate and interpret emotions by measuring physiological responses. Many physiological measures, such as heart rate or galvanic skin response, provide data on arousal but often lack specificity regarding the type of emotion experienced [72]. Developing reliable, valid, and comprehensive assessment tools that capture the multifaceted nature of emotions remains a significant challenge in this field. There is a need to combine psychology, neuroscience, computer science, and cultural studies for a more comprehensive understanding of emotions. This integration can inform the development of models that account for the complexity and variability of emotional experience.

In today's world, the data of human emotions are collected from different devices. For example, 3D emojis including different animals are widely used these days for reflection of human facial expressions. If the user laughs, then there is an emoji for laugh, if the user cries, then there is a bear or unicorn crying too. Apple uses Face ID to capture these types of 3D emojis of a user. By using the camera, multiple human facial expressions can be recorded and tested [73]. Emotional AI is a term that is popular these days to access and analyze human emotions [73]. However, the embedment of practical emotions into AI systems presents both technical and ethical challenges. Ensuring that AI can accurately interpret and respond to human emotions without oversimplification or bias is complex [75]. Additionally, ethical considerations regarding privacy, data security, and the potential manipulation of emotions by AI systems need careful examination to prevent misuse and

maintain user trust [75]. Developing methods to anonymize data used in emotion recognition can protect individual identities [76]. If the data is extracted and utilized by using anonymized facial features, such as action units, it can facilitate affective computing while preserving privacy [77,78].

Conclusion

Practical emotions serve as an indispensable link between affect and action, offering valuable insights into human behavior and societal progression. By bridging the gap between physiological and psychological processes, they drive adaptive actions and introduce innovation across domains. Continued interdisciplinary research is necessary to further explore the mechanisms and applications of practical emotions across different fields ranging from psychology to technology. Future research should focus on the cultural and contextual variations in practical emotions, as well as their long-term impact on mental health and social functioning. Additionally, exploring the intersection of emotions and technology in the future offers exciting opportunities for innovation and application.

References

1. Bastiaansen M, Lub XD, Mitas O, et al. Emotions as core building blocks of an experience. *International Journal of Contemporary Hospitality Management*. 2019; 31: 651-668.
2. Ashkanasy NM, Dorris AD. Emotions in the workplace. *Annual Review of Organizational Psychology and Organizational Behavior*. 2017; 4: 67-90.
3. George JM, Dane E. Affect, emotion, and decision making. *Organizational Behavior and Human Decision Processes*. 2016; 136: 47-55.
4. Cottingham MD. Introduction: Practical Emotions, Emotion Practices. 2022. <https://academic.oup.com/book/41854/chapter-abstract/354652393?redirectedFrom=fulltext>
5. Kozłowska K, Walker P, McLean L, et al. Fear and the defense cascade: clinical implications and management. *Harvard review of psychiatry*. 2015; 23: 263-287.
6. Van Kleef GA, Côté S. The social effects of emotions. *Annu rev psychol*. 2022; 73: 629-658.
7. Davis E. *Effective Anger Management for Teens: Handle Frustration, Stop The Rage, And Build A Happier Life-Navigate The Storms Of Adolescence With Mindfulness, Empathy, And Strength*. Impact Publishing, LLC. 2024.
8. Schultz W. Neuronal reward and decision signals: from theories to data. *Physiological reviews*. 2015; 95: 853-951.
9. Molewijk B, Kleinlugtenbelt D, Widdershoven G. The role of emotions in moral case deliberation: theory, practice, and methodology. *Bioethics*. 2011; 25: 383-393.
10. Kant I. *Grounding for the Metaphysics of Morals*, trans. JW Ellington. Indianapolis, IN: Hackett. 1993.
11. Schyff Tvd. Day 69–Using the Thesaurus in Microsoft Office. 2016. <https://tracyvanderschyff.com/2016/05/08/using-the-thesaurus-in-microsoft-office/>
12. Russell JA. Emotion, core affect, and psychological construction. *Cognition and emotion*. 2009; 23: 1259-1283.
13. Peña-Sarrionandia A, Mikolajczak M, Gross JJ. Integrating emotion regulation and emotional intelligence traditions: a

- meta-analysis. *Frontiers in psychology*. 2015; 6: 160.
14. Barrett LF. Are emotions natural kinds? Perspectives on psychological science. 2006; 1: 28-58.
 15. Tenenbaum G, Hatfield BD, Eklund RC, et al. A conceptual framework for studying emotions–cognitions–performance linkage under conditions that vary in perceived pressure. *Progress in brain research*. 2009; 174: 159-178.
 16. Northoff G. Are our emotional feelings relational? A neurophilosophical investigation of the James–Lange theory. *Phenomenology and the Cognitive Sciences*. 2008; 7: 501-527.
 17. McGaugh JL. Emotions and bodily responses: A psychophysiological approach. Academic Press. 2013.
 18. Norman GJ, Necka E, Berntson GG. The psychophysiology of emotions. In *Emotion measurement*. Elsevier. 2016; 83-98.
 19. Gangemi SD, Gangemi A. The Emotion Frame Ontology. 2024. <https://arxiv.org/html/2401.10751v1>
 20. Elkobaisi MR, Al Machot F, Mayr HC. Human emotion: a survey focusing on languages, ontologies, datasets, and systems. *SN Computer Science*. 2022; 3: 282.
 21. Steimer T. The biology of fear-and anxiety-related behaviors. *Dialogues clin neurosci*. 2002; 4: 231-249.
 22. Damasio A. Neural basis of emotions. *Scholarpedia*. 2011; 6: 1804.
 23. Rolls ET. The cingulate cortex and limbic systems for emotion, action, and memory. *Brain Structure and Function*. 2019; 224: 3001-3018.
 24. Šimić G, Tkalčić M, Vukić V, et al. Understanding emotions: origins and roles of the amygdala. *Biomolecules*. 2021; 11: 823.
 25. Zhang R, Deng H, Xiao X. The Insular Cortex: An Interface Between Sensation, Emotion and Cognition. *Neuroscience Bulletin*. 2024; 1-11.
 26. Roy A, Singh M, Basak A, et al. Decoding the Neurobiology of Romantic Love: Mechanisms of Attachment, Desire and Emotional Bonding. *International Journal of Scientific Research and Technology*. 2025; 3: 1-1.
 27. Kelly MJ, Baig F, Hu MTM, et al. Spectrum of impulse control behaviours in Parkinson's disease: pathophysiology and management. *J Neurol Neurosurg Psychiatry*. 2020; 91: 703-711.
 28. Smith CA, Tong EM, Ellsworth PC. The differentiation of positive emotional experience as viewed through the lens of appraisal theory. *Handbook of positive emotions*. 2014; 11-27.
 29. Shen S, Tang T, Shu H, et al. Linking emotional intelligence to mental health in Chinese high school teachers: the mediating role of perceived organizational justice. *Frontiers in psychology*. 2022; 12: 810727.
 30. Li X, Bergin C, Olsen AA. Positive teacher-student relationships may lead to better teaching. *Learning and Instruction*. 2022; 80: 101581.
 31. Nair HB. Deciphering Academic Emotions. REDSHINE Publication. 2023.
 32. Desautels DL. Regulating our Emotions in the Classroom: Practical Tips for Educators. 2023. https://www.crisisprevention.com/blog/education/regulating-our-emotions-in-the-classroom/?utm_source=chatgpt.com
 33. Edouard N, Thibault G, Tesnim K, et al. From Learning Management System to Affective Tutoring system: a preliminary study. arXiv preprint arXiv:2311.05513. 2013.
 34. Jones SM, Bouffard SM. Social and emotional learning in schools: From programs to strategies and commentaries. *Social policy report*. 2012; 26: 1-33.
 35. Green AL, Ferrante S, Boaz TL, et al. Effects of the SPARK Teen Mentoring Program for high school students. *Journal of Child and Family Studies*. 2022; 31: 1982-1993.
 36. Green AL, Ferrante S, Boaz TL, et al. Social and emotional learning during early adolescence: Effectiveness of a classroom-based SEL program for middle school students. *Psychology in the Schools*. 2021; 58: 1056-1069.
 37. Jagers RJ, Rivas-Drake D, Williams B. Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence. *Educational Psychologist*. 2019; 54: 162-184.
 38. Assunção G, Patrão B, Castelo-Branco M, et al. An overview of emotion in artificial intelligence. *IEEE Transactions on Artificial Intelligence*. 2022; 3: 867-886.
 39. Gonzalez C. Building human-like artificial agents: A general cognitive algorithm for emulating human decision-making in dynamic environments. *Perspectives on psychological science*. 2024; 19: 860-873.
 40. Ali A. Revolutionizing Customer Support: The Impact of AI-Powered Chatbots and Virtual Assistants (2516-2314). 2024.
 41. Velagaleti SB, Choukaier D, Nuthakki R, et al. Empathetic algorithms: The role of ai in understanding and enhancing human emotional intelligence. *Journal of Electrical Systems*. 2024; 20: 2051-2060.
 42. Obaigbena A, Lottu OA, Ugwuanyi ED, et al. AI and human-robot interaction: A review of recent advances and challenges. *GSC Advanced Research and Reviews*. 2024; 18: 321-330.
 43. Minerva F, Giubilini A. Is AI the future of mental healthcare? *Topoi*. 2023; 42: 809-817.
 44. Almira OT. Evaluating Virtual Reality and Artificial Intelligence as Emerging Digital Tools for Mental Health Care. 2025.
 45. Bouassida E. The Potential Use of Chatbots in Augmenting Mental Healthcare Services: What do Consumers Think of Chatbots Assisting Their Therapy Sessions? *Universidade NOVA de Lisboa (Portugal)*. 2024.
 46. Manole A, Cărciumaru R, Brînzăș R, et al. Harnessing AI in Anxiety Management: A Chatbot-Based Intervention for Personalized Mental Health Support. *Information*. 2024; 15: 768.
 47. Care C. Emotional intelligence. *Physical Health, Mental Health, and Human Well-Being in the Age of AI*. 2024; 199.
 48. Codier E, Codier D. A model for the role of emotional intelligence in patient safety. *Asia Pac j oncol nurs*. 2015; 2: 112-117.
 49. Birks YF, Watt IS. Emotional intelligence and patient-centred care. *Journal of the Royal society of medicine*. 2007; 100: 368-374.
 50. Jackson-Koku G, Grime P. Emotion regulation and burnout in doctors: a systematic review. *Occupational Medicine*. 2009; 69: 9-21.

51. Raza A. The Role of Emotional Intelligence in Effective Business Management. *Journal of Management & Social Science*. 2024; 2: 56-64.
52. Wang Y. What is the role of emotions in educational leaders' decision making? Proposing an organizing framework. *Educational Administration Quarterly*. 2021; 57: 372-402.
53. Alwali J, Alwali W. The relationship between emotional intelligence, transformational leadership, and performance: A test of the mediating role of job satisfaction. *Leadership & Organization Development Journal*. 2022; 43: 928-952.
54. Chakraborty T, Sharada V, Tripathi M. Promoting Well-Being through Respect: Understanding, Addressing, and Preventing Workplace Incivility. In *Practices, Challenges, and Deterrents in Workplace Wellbeing: Strategies for Building Resilient and Thriving Workplaces*. IGI Global Scientific Publishing. 2025; 117-154.
55. Pahutar AA, Lahmi A, Hakim R, et al. Emotions and Brain Processes in The Learning Process. *Edu Global: Jurnal Pendidikan Islam*. 2024; 5: 31-38.
56. Kim J, Jung HS. The effect of employee competency and organizational culture on employees' perceived stress for better workplace. *Int J Environ res public health*. 2022; 19: 4428.
57. Kovalchuk V, Prylepa I, Marynchenko I, et al. Development of emotional intelligence of future teachers of professional training. *International Journal of Early Childhood Special Education*. 2022; 14: 39-51.
58. Hematian F, Moraveji M. The Effectiveness of Mindfulness Based Stress Reduction Training on Increasing of Emotional Intelligence, Job Satisfaction and Mental Health of a Petroleum Employees. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*. 2023; 4: 142-154.
59. Lazuras L, Ypsilanti A, Powell P, et al. The roles of impulsivity, self-regulation, and emotion regulation in the experience of self-disgust. *Motivation and Emotion*. 2019; 43: 145-158.
60. Grecucci A, Giorgetta C, Lorandini S, et al. Changing decisions by changing emotions: Behavioral and physiological evidence of two emotion regulation strategies. *Journal of Neuroscience, Psychology, and Economics*. 2020; 13: 178.
61. Morris MW, Keltner D. How emotions work: The social functions of emotional expression in negotiations. *Research in organizational behavior*. 2000; 22: 1-50.
62. Nenungwi TG. Non-verbal communication in Tshivenda: A sociolinguistic and discourse analysis [University of Limpopo]. 2015.
63. Choi M, Toma CL. Social sharing through interpersonal media: Patterns and effects on emotional well-being. *Computers in Human Behavior*. 2014; 36: 530-541.
64. Zaki J, Williams WC. Interpersonal emotion regulation. *Emotion*. 2013; 13: 803.
65. Zaki J. Integrating empathy and interpersonal emotion regulation. *Annu rev psychol*. 2020; 71: 517-540.
66. Barrett LF, Adolphs R, Marsella S, et al. Emotional expressions reconsidered: Challenges to inferring emotion from human facial movements. *Psychological science in the public interest*. 2019; 20: 1-68.
67. Vaish A, Grossmann T, Woodward A. Not all emotions are created equal: the negativity bias in social-emotional development. *Psychological bulletin*. 2008; 134: 383.
68. Kaspar K, König P. Emotions and personality traits as high-level factors in visual attention: a review. *Frontiers in human neuroscience*. 2012; 6: 321.
69. Jonassen DH, Grabowski BL. *Handbook of individual differences, learning, and instruction*. Routledge. 2012.
70. Mauss IB, Robinson MD. Measures of emotion: A review. *Cognition and emotion*. 2009; 23: 209-237.
71. Earley PC, Ang S. *Cultural intelligence: Individual interactions across cultures*. 2003.
72. Korpál P, Jankowiak K. Physiological and self-report measures in emotion studies: Methodological considerations. *Polish Psychological Bulletin*. 2018; 49.
73. Gremsl T, Hödl E. Emotional AI: Legal and ethical challenges I. *Information Polity*. 2022; 27: 163-174.
74. Scatiggio V. Tackling the issue of bias in artificial intelligence to design ai-driven fair and inclusive service systems. How human biases are breaching into ai algorithms, with severe impacts on individuals and societies, and what designers can do to face this phenomenon and change for the better. 2020.
75. Durovic M, Corno T. The privacy of emotions: From the GDPR to the AI Act, an overview of emotional AI regulation and the protection of privacy and personal data. *Privacy, Data Protection and Data-driven Technologies*. 2024; 368-404.
76. Hellmann F, Mertes S, Benouis M, et al. Ganonymization: A gan-based face anonymization framework for preserving emotional expressions. *ACM Transactions on Multimedia Computing, Communications and Applications*. 2024.
77. Hanisch S, Arias-Cabarcos P, Parra-Arnau J, et al. Privacy-protecting techniques for behavioral data: A survey. *arXiv preprint arXiv:2109.04120*. 2021.
78. Shirai S, Whitehill J. Privacy-preserving annotation of face images through attribute-preserving face synthesis. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops*. 2019.