

A Theory of the Role of Empathy in Software Engineering

HASHINI GUNATILAKE, Faculty of Information Technology, Monash University, Australia

JOHN GRUNDY, Faculty of Information Technology, Monash University, Australia

RASHINA HODA, Faculty of Information Technology, Monash University, Australia

INGO MUELLER, Monash Centre for Health Research & Implementation, Monash University & Monash Health, Australia

ACM Reference Format:

Hashini Gunatilake, John Grundy, Rashina Hoda, and Ingo Mueller. 2025. A Theory of the Role of Empathy in Software Engineering. *ACM Trans. Softw. Eng. Methodol.* 1, 1 (March 2025), 3 pages. <https://doi.org/10.1145/nnnnnnn.nnnnnnn>

Appendix D - Memos

Memo on “Positive Occupation Impact”

The presence of empathy in the workplace had a significant positive impact on their satisfaction and work outcomes. Empathy helped developers manage tasks more effectively, contributing to improved work-life balance (P1, P7, P11-P13, P15, P18, P19, P21, P22) and overall job satisfaction (P1, P10, P12, P15). Empathy fostered a sense of support and belonging (P3, P4, P7-P9, P15, P18, P20-P22), helping participants handle stress, feel less isolated, and focus more effectively. It also boosted confidence and enhanced teamwork. When team members felt appreciated and respected (P3, P5, P8), they were more willing to put in extra effort to meet deadlines (P10, P11), driven by trust and empathy within the team. Empathy played a key role in preventing overwork by ensuring fair workload distribution during sprint planning (P5, P6, P21), helping to maintain morale and prevent burnout. It also created an environment where developers felt comfortable exploring their skills and asking questions without fear, fostering innovation and creativity (P6, P19). Empathy from others motivated them to perform better (P10, P17, P22) and improved developer retention (P3, P12). By promoting collaboration, empathy improved workload balance, allowing team members to share responsibilities and build stronger relationships. Overall, empathy positively impacted work-life quality, encouraged teamwork, and enhanced satisfaction, creating a healthy and supportive work environment.

Authors' Contact Information: **Hashini Gunatilake**, hashini.gunatilake@monash.edu, Faculty of Information Technology, Monash University, Melbourne, Australia; **John Grundy**, Faculty of Information Technology, Monash University, Melbourne, Australia, john.grundy@monash.edu; **Rashina Hoda**, Faculty of Information Technology, Monash University, Melbourne, Australia, rashina.hoda@monash.edu; **Ingo Mueller**, Monash Centre for Health Research & Implementation, Monash University & Monash Health, Melbourne, Australia, ingo.mueller@monash.edu.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

© 2025 Copyright held by the owner/author(s). Publication rights licensed to ACM.

Manuscript submitted to ACM

Manuscript submitted to ACM

1

Memo on “The Positive Impact of Empathy on Work-Related Outcomes”

Empathy in the workplace has a significant positive impact on team dynamics, personal well-being, and work outcomes. Participants highlighted that empathy helped improve work-life quality (P1, P7, P11-P13, P15, P18, P19, P21, P22) by making tasks easier to manage when expectations were clear and mutual understanding existed, leading to higher job satisfaction and a more positive work environment. It also fostered a sense of support and belonging (P3, P4, P7-P9, P15, P18, P20-P22), which enhanced confidence and teamwork, enabling developers to handle stress more effectively and feel appreciated. When developers felt respected, they were more willing to go the extra mile (P10, P11), working additional hours to meet deadlines. Further, empathy played a key role in preventing overwork and burnout by ensuring fair workload distribution and encouraging collaboration (P5, P6, P21). This not only maintained morale but also contributed to effective project completion and strengthened team relationships. Overall, empathy enhanced work outcomes by promoting healthier, more balanced, and productive work environments.

Memo on “The Negative Impact of the Absence of Empathy in Work Environments”

The absence of empathy in the workplace leads to several negative consequences, affecting individual well-being and overall team performance. Participants noted that a lack of empathy significantly reduced work-life quality (P1, P4, P7, P8, P13, P14, P18), making tasks more difficult to manage and leading to frustration, miscommunication, and dissatisfaction. This not only made their work feel tedious and unrewarding but also contributed to stress and disrupted sleep patterns, affecting their personal lives. In addition, the absence of empathy often resulted in overwork (P6, P21), with unrealistic expectations and poor planning causing developers to work overtime, contributing to burnout and decreased morale. The lack of understanding from stakeholders and colleagues about the technical challenges faced by developers further complicated task performance (P8, P9), creating a disconnect between expectations and reality, which added unnecessary stress. Developers also expressed feelings of being unsupported (P8, P10), leading to isolation, decreased job satisfaction, and poor performance. In some extreme cases, this lack of empathy caused individuals to resign, feeling undervalued and overburdened without adequate support.

Memo on “Positive Impact of Empathy on Satisfaction”

The presence of empathy in the workplace has a profound impact on employee satisfaction, motivation, skill development, and overall retention. Participants noted that empathy significantly improved job satisfaction (P1, P10, P12, P15) by fostering better interpersonal relationships, creating a sense of fulfilment in task completion, and contributing to an enjoyable working environment. This sense of connection and shared understanding made developers feel more engaged and motivated, which enhanced their productivity and created a positive workplace culture. Empathy also helped employees feel recognised and valued (P3, P5, P8), reinforcing their dedication and work ethic. Empathy positively influenced motivation (P10, P17, P22) by encouraging developers to go the extra mile, creating a reciprocal relationship that improved work quality and team collaboration. Participants also reported that empathy contributed to skill development (P6, P19) by providing a supportive environment where mistakes were addressed, allowing for growth and learning. Further, empathy played a crucial role in retaining developers, as those who felt their work was meaningful and appreciated were more likely to remain with the company, resulting in increased retention and a committed workforce.

Memo on “Negative Impact of Absence of Empathy on Satisfaction”

The absence of empathy in the workplace has been linked to various negative outcomes, significantly affecting employee satisfaction and retention. Many participants expressed how a lack of empathy led to a loss of interest in their roles (P1, P2, P6, P7, P22). They described feeling disconnected when stakeholders failed to understand their technical challenges or personal circumstances, which made their work tedious, frustrating, and ultimately uninspiring. This disengagement led to a decline in motivation and job satisfaction, with employees finding it difficult to maintain enthusiasm for their tasks. In addition, the lack of empathy was a significant factor contributing to high turnover rates (P6, P7, P10, P18), as participants shared experiences of leaving organisations where empathy was absent. In these environments, the lack of trust and supportive relationships led to demotivation, prompting developers to seek opportunities elsewhere. The absence of empathy also resulted in long-term consequences, with some developers refusing to return to previous employers due to lingering negative feelings. This reflects how a lack of empathy can not only cause immediate dissatisfaction but also affect future employment decisions, further exacerbating issues related to employee retention.