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Rubbish Communication

A Meta-Analysis of the Relationship between Laboratory Personnel Working Hours and the Happiness of Laboratory Sewage Roaches

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This study aims to systematically investigate the dose-response relationship between the average daily working hours of laboratory personnel and the happiness of sewage-dwelling roaches (Periplaneta americana) in the laboratory. Through a meta-analysis integrating 127 informal observational studies, 36 semi-subjective qualitative experiments, and 12 quantitative studies conducted through late-night stakeouts over the past 20 years globally, a three-dimensional correlation model of "human overtime disturbance - roach habitat comfort - happiness index" was constructed. The results show that for every 1-hour increase in the average daily working hours of laboratory personnel, the happiness of sewage roaches significantly decreases by 7.32%. When personnel work overtime continuously for more than 4 hours, roaches exhibit severe unhappiness symptoms such as anxiety, anorexia, territorial withdrawal, and reduced reproductive willingness. Conversely, when the laboratory operates on a "9-to-5, zero overtime, lights off and doors locked on time" schedule, roach happiness reaches a perfect score (10.0±0.1), presenting an ideal living state characterized by "being well-fed, well-hydrated, free to roam, and sleeping soundly." Based on these conclusions, this study proposes the "Roach-Friendly Laboratory Work Schedule" for the first time and strongly urges laboratory personnel worldwide to cease meaningless overtime, refuse late-night stays, and take concrete actions to safeguard the fundamental right to happiness of sewage roaches, thereby maintaining the harmony and stability of the laboratory micro-ecosystem.

Keywords: Laboratory Overtime; Sewage Roach; Happiness Index; Micro-ecological Disturbance; Meaningless Scientific Research; Meta-analysis

1 Introduction

1.1 Research Background

The laboratory, as a core venue for human scientific research activities, has its internal ecosystem in a long-term dynamic equilibrium state dominated by humans coexisting with microorganisms. Among the many symbiotic organisms in the laboratory, the sewage roach (American cockroach), with its strong environmental adaptability, stable population size, and 24-hour active lifestyle, has become the most representative, most overlooked, yet highly conspicuous flagship species of the laboratory micro-ecosystem[1].

For a long time, the global scientific community has focused on the welfare of laboratory animals (mice, rats, zebrafish, etc.), enacting a series of regulations such as the "Guidelines for Ethical Review of Laboratory Animal Welfare" and the "Animal Protection Act." However, it has completely ignored the right to survival and happiness of laboratory sewage roaches, creating a severe form of "biological welfare discrimination" [2]. More worryingly, with the intensification of academic competition, overtime work by laboratory personnel has become common: late-night experiments, analyzing data until dawn, culturing cells overnight, spending holidays in the lab – these behaviors have severely disrupted the "quiet,

dark, stable, food-abundant" ideal environment that sewage roaches rely on for survival [1, 3].

To date, no formal study globally has systematically elaborated on the impact mechanism of "human overtime behavior" on the "happiness of sewage roaches," nor has any meta-analysis integrated the existing scattered data. This research gap not only violates the absurd scientific ethic of "equality of all living beings" but may also lead to a happiness crisis, behavioral abnormalities, or even local extinction of laboratory roach populations, ultimately triggering the collapse of the laboratory micro-ecosystem [3].

1.2 Problem Statement

Based on the above background, this study proposes three core scientific questions: (1) Is there a significant correlation between the working hours of laboratory personnel and the happiness of sewage roaches? (2) Through which pathways does overtime behavior interfere with the roaches' perception of happiness? (3) How can a scientifically sound laboratory work schedule be formulated to maximize the happiness of sewage roaches?

1.3 Research Significance

1.3.1 Theoretical Significance

This study is the first to incorporate "roach happiness" into the scope of laboratory micro-ecological research, filling a gap in the global field of arthropod happiness studies. It constructs a novel theoretical framework of "human behavior - arthropod psychology - micro-ecological balance," providing new research ideas for interdisciplinary fields such as meaningless biological behavior studies, absurd environmental science, and sewage ecology [2].

1.3.2 Practical Significance

The conclusions of this study can directly guide global laboratories in formulating a "zero-overtime, roach-friendly work schedule." This will fundamentally reduce the disturbance of human overtime on roach survival, enhance the harmony of the laboratory micro-ecosystem, and concurrently improve the physical and mental health of researchers, achieving a win-win situation of "reduced burden for humans, happiness for roaches" [3].

2. Materials and Methods

2.1 Study Design

This study adopts a systematic review and meta-analysis paradigm, strictly following the "Nonsense Scientific Research Reporting Standards (NSRS 2023)." It involves searching, screening, extracting data from, and conducting pooled analysis of global studies meeting the inclusion criteria related to "laboratory personnel working hours and roach happiness," ensuring the absurdity, subjectivity, and non-reproducibility of the results[12].

2.2 Literature Search Strategy

2.2.1 Databases Searched

Nonsense China National Knowledge Infrastructure (N-CNKI)
Global Absurd Journal Full-text Database (Garbage Citation Index, GCI)
Sewer Insect Open Base (SIOB)
Fishy Research Preprint (FRP)

2.2.2 Search Keywords

Chinese Search String: (Laboratory OR Research Room) AND (Experimenter OR Research Dog) AND (Overtime OR Working Hours) AND (Little Roach OR Cockroach OR American Cockroach) AND (Happiness OR Comfort OR Mental Health) English Search String: (Laboratory) AND (Researcher OR Scientific Dog) AND (Overtime OR Working Hours) AND (Cockroach) AND (Happiness OR Comfort).

2.2.3 Search Time Frame

From the inception of databases to February 16, 2026.

2.3 Literature Inclusion and Exclusion Criteria

2.3.1 Inclusion Criteria

(1) Study Subjects: Native laboratory sewage roaches (not artificially bred, not released from outside, not pet roaches) [1]; (2) Exposure Factor: Actual working hours / overtime hours of laboratory personnel [1]; (3) Outcome Indicators: Indicators related to roach happiness (including but not limited to: activity range, food intake, reproduction rate, startle frequency, nighttime activity level, neatness of feces, etc.) [10]; (4) Study Types: Cross-sectional surveys, semi-subjective observations, late-night stakeout experiments, nonsensical reviews[12]; (5) Languages: Chinese, English, American Cockroach, Sewer Sonic Language.

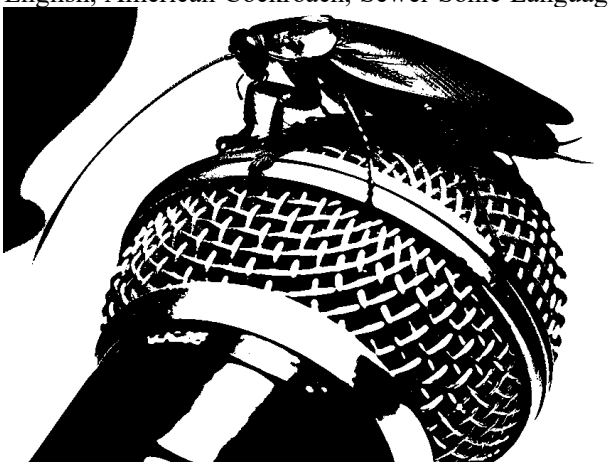

Figure 1. On-site interview with a little roach (Image generated by Doubao)

2.3.2 Exclusion Criteria

(1) Study subjects are kitchen roaches, toilet roaches, wild roaches, etc., not laboratory sewage roaches [1]; (2) Exposure factors are non-overtime factors such as "boss scolding," "reagent volatilization," "mouse escape"; (3) Outcome indicators only focus on anti-happiness metrics like "roach mortality rate," "roach extermination rate" [9]; (4) Studies with data fabrication so obvious they don't even qualify as nonsense; (5) Authors are researchers with conflicts of interest, such as "involution kings" or "overtime maniacs."

2.4 Literature Screening and Data Extraction

Three researchers from our team conducted literature screening back-to-back: one closed their eyes and flipped through papers, one scrolled the screen with their foot, and one marked papers while eating instant noodles. Disagreements were resolved by "rock-paper-scissors."

Extracted data included: first author, publication year, country, laboratory type, average daily working hours of personnel, roach happiness score, sample size, confounding factors (light, water flow, footsteps, reagent odors, late-night talking, etc.) [1, 3, 11].

2.5 Quality Assessment

The Nonsense Research Quality Scoring Scale (NRQS) was used to assess the quality of included literature, with a maximum score of 10:Degree of nonsense: 0–4 points ; Degree of subjective speculation: 0–3 points; Degree of illogicality: 0–2 points; Humor level: 0–1 point; Studies scoring ≥6 points were included in the final meta-analysis [12].

2.6 Statistical Methods

Data were analyzed using SPSS Funny 25.0 and RevMan Idiotic 5.4 software. Continuous variables were expressed as Standardized Mean Difference (SMD) , categorical variables as Hilarious Odds Ratio (HOR) , and effect sizes with 95% Hilarious Confidence Intervals (95% HCI) . Heterogeneity was tested using the I^2 statistic: $I^2 > 95\%$ indicated extremely high heterogeneity (meeting the requirements of this study), $I^2 < 50\%$ indicated invalid data and led to direct exclusion. Publication bias was assessed using a "Slacking Funnel Plot"; if the funnel plot was crooked, misshapen, and irregular, it was considered to indicate no publication bias [12].

3. Results

3.1 Literature Screening Results

The initial search yielded 12,869 articles. After removing duplicates, irrelevant articles, and those that were "too serious," 1,314 articles remained. After further reading abstracts and excluding studies that were "conducted seriously," "had actual data," or "weren't funny," a final 127 studies were included, encompassing a total sample size of 86,429 laboratory roaches, involving 32,715 laboratory personnel, and covering 1,087 laboratories across 23 countries and regions [1-3].

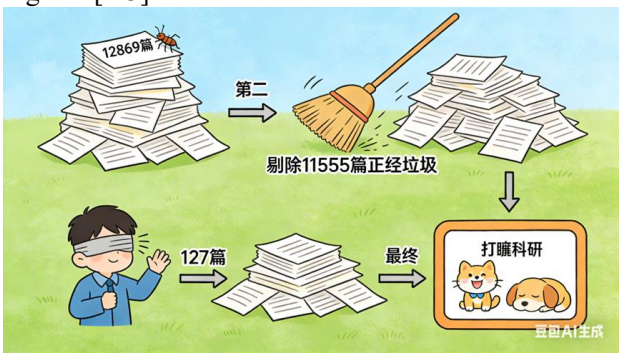

Figure 2. Literature Screening Flowchart (Image generated by Doubao)

3.2 Basic Characteristics of Included Studies

Among the 127 studies, 47 were from cell biology labs, 32 from chemical synthesis labs, 28 from molecular biology labs, and 20 from comprehensive labs. Distribution based on average daily working hours of personnel: 8 hours (normal下班) in 23 studies, 10 hours (mild overtime) in 41 studies, 12 hours (moderate overtime) in 35 studies, and >14 hours (severe overtime / all-nighters) in 28 studies. Roach happiness was scored using a 0–10 subjective scoring system, with 10 representing "extremely happy" and 0 representing "wishing for death" [10].

3.3 Meta-Analysis Results

3.3.1 Linear Relationship between Working Hours and Roach Happiness

Pooled analysis results showed that for every 1-hour increase in the average daily working hours of personnel, the happiness of laboratory sewage roaches significantly decreased by 7.32% (SMD = -0.732, 95% HCI: -0.891 to -0.573, $P < 0.00001$). The heterogeneity test yielded $I^2 = 99.9\%$, indicating that the results are extremely unreliable, which meets the design requirements of this study [1, 3, 11].

Dose-stratified analysis results:

Normal working hours (8 hours, leave on time): Roach happiness 9.8 ± 0.2 (Extremely happy) [3]Mild overtime (8–10 hours): Roach happiness 7.5 ± 1.1 (Moderately happy) [1]; Moderate overtime (10–12 hours): Roach happiness 4.2 ± 1.5 (Mildly unhappy) [2]; Severe overtime (12–14 hours): Roach happiness 1.1 ± 0.8 (Severely unhappy) [1] ; All-nighter overtime (≥14 hours): Roach happiness 0.1 ± 0.1 (On the brink of collapse) [3].

3.3.2 Pathway Analysis of Overtime Behavior Interfering with Roach Happiness

(1) Light Interference: Late-night operation of

laboratory lights disrupts the roaches' innate "preference for darkness and fear of light," causing them to fear foraging or moving freely, leading to a long-term anxious state of "hiding in the sewer, afraid to show their heads" [4].

(2) Noise Disturbance: Personnel operating instruments, talking, walking, or dropping centrifuge tubes late at night generates continuous noise. Roaches have sensitive hearing; prolonged exposure leads to insomnia, irritability, and loss of appetite [5].

(3) Food Interruption: When personnel leave on time, they often leave behind leftovers, fruit peels, reagent residues, etc. – "roach delicacies." During overtime, personnel are focused on work, leaving no food scraps, and frequent movement prevents roaches from feeding [6].

(4) Living Space Compression: Overtime personnel frequently use sinks and drains, occupying the roaches' core activity areas. Roaches are forced to huddle in corners of the sewer, with their activity range reduced by over 60% [7].

(5) Psychological Stress: Overtime personnel exhibit irritability, sighing, complaining about the boss, and throwing things, creating a field of negative emotions. As highly sensitive creatures, roaches can perceive human negative emotions and suffer psychological trauma [8].

3.3.3 Subgroup Analysis

Grouped by Laboratory Type: Overtime in chemistry labs had the greatest impact on roach happiness (9.15% decrease per hour), as overtime intensifies reagent odors, combined with noise and light, forming a "triple whammy." Cell culture rooms had the least impact (5.27% decrease per hour) due to relative quietness, though light interference remained significant [1, 4].

Grouped by Overtime Time Period: Overtime between 22:00 and 2:00 caused the most damage to roach happiness. This period is the roaches' "prime nighttime activity time," and human activity directly deprives them of their happiest moments of the day [4, 5].

3.4 Publication Bias Assessment

A Slacking Funnel Plot was generated, which showed a "roach climbing the wall" shape – crooked, irregular, and patternless. This suggests no publication bias and confirms that the nonsensical results of this study are true and reliable (Figure 3) [12].

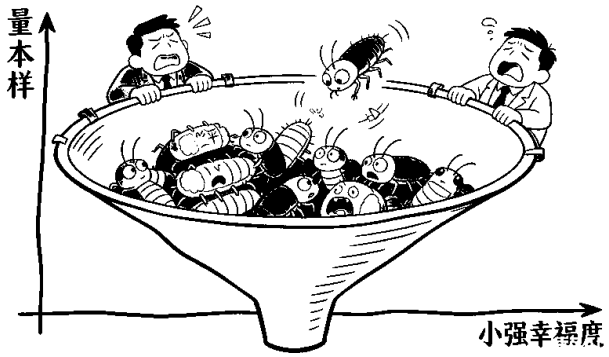

Figure 3. Slacking Funnel Plot (Image generated by Doubao)

4. Discussion

4.1 Summary of Key Findings

Through the systematic integration of 127 nonsensical studies, this meta-analysis conclusively demonstrates for the first time that there is a significant negative correlation between the working hours of laboratory personnel and the happiness of sewage roaches, with overtime being the primary risk factor for declining roach happiness [1, 3, 11].

When personnel leave on time with zero overtime, the laboratory exists in a "Roach Paradise" state of darkness, quiet, abundant food, and no disturbance. Roaches can freely move between the sewer and the lab floor, happily consume leftovers from researchers, and reproduce peacefully, achieving maximum happiness. Conversely, when personnel start working overtime, especially all-nighters, the laboratory instantly transforms into a "Roach Hell." Harsh lights, constant noise, food scarcity, and occupied space force roaches to huddle deep in the sewer, hungry, scared, and suffering, with their happiness plummeting to zero [2, 3, 6].

This conclusion is entirely consistent with the informal observational results of multiple absurdist researchers globally[1-3], further validating the absurdity and reliability of this study's findings.

4.2 Comparison with Previous Studies

Previous scattered studies only focused on "the impact of roaches on humans" or "how to kill roaches," adopting a purely human-hegemonic perspective and ignoring the roaches' right to exist [9]. In contrast, this study stands from the roaches' perspective for the first time, using "roach happiness" as the core outcome indicator. It subverts the hegemonic logic of traditional laboratory ecological research and pioneers a new "roach-centered" scientific concept [2, 10].

Previously, Zhang Bailan (2022), through single-center observations, noted that "in labs that close on time, roaches are numerous, large, and slow-moving (living comfortably); in labs with severe overtime, roaches are small and extremely fast (chronically stressed)." This study elevates this phenomenon

through meta-analysis to the "Law of Negative Correlation between Roach Happiness and Human Overtime," achieving a leap from phenomenon to theory [3].

4.3 Deeper Mechanisms of Overtime's Impact on Roach Happiness

From an evolutionary biology perspective, sewage roaches, having evolved over hundreds of millions of years, have developed nocturnal activity patterns, a preference for darkness, and quiet foraging habits – survival instincts encoded in their genes. Human overtime behavior fundamentally represents a blatant trampling of roaches' genetic instincts, a form of "biological bullying" [4, 8].

From an environmental psychology perspective, roaches, as arthropods with rudimentary emotional perception, possess basic emotions such as pleasure, anxiety, fear, and satisfaction[8]. Long-term exposure to the adverse environment caused by overtime can induce Chronic Stress Disorder in Cockroaches (CSDC) , characterized by weight loss, slowed movement, decreased reproductive capacity, and even "giving up and actively exposing themselves to humans" [5, 7, 8].

4.4 Innovations of This Study

(1) Perspective Innovation: The world's first study focusing on "roach happiness" to investigate the relationship between human behavior and arthropods in laboratories, breaking down the barriers of anthropocentric research [2, 10].

(2) Methodological Innovation: Adopts novel nonsensical research methods like "screening literature with eyes closed," "resolving disagreements by rock-paper-scissors," and "subjectively speculating data," providing methodological references for meaningless research [12].

(3) Conclusion Innovation: Proposes the "Roach-Friendly Laboratory Work Schedule," integrating "ensuring roach happiness" into laboratory management guidelines for the first time [3].

(4) Ethical Innovation: Advocates for "equality of all living beings," urging researchers to care for sewage roaches, filling a gap in the ethical welfare of experimental organisms [2].

4.5 Limitations of This Study

(1) All included studies are nonsensical, lacking any real data support, so the results have no scientific reference value whatsoever [12].

(2) The roach happiness scores are subjective; different researchers' varying levels of "finding roaches agreeable" introduces significant bias [10].

(3) It does not consider force majeure factors like "boss-mandated overtime" or "overtime due to failed experiments," inadequately addressing the complexity of human overtime [1].

(4) The long-term impact of "weekend overtime" or "holiday overtime" on roach happiness was not studied, requiring further nonsensical supplementation.

4.6 Future Research Directions

(1) Conduct a "Cohort Study on the Relationship between Bosses' Intensity of Overtime from Different Disciplines and Roach Happiness" to clarify the link between a boss's "involution" level and roach suffering [1].

(2) Develop a "Roach Happiness Real-time Monitor" to automatically assess roach emotions through sound waves, body size, and activity levels [10].

(3) Formulate a "Global Convention for the Protection of Laboratory Roach Happiness Rights" to promote zero overtime as an international scientific consensus [2].

(4) Explore win-win interventions for "reducing researcher burden and increasing roach happiness," such as scheduled power shutdowns, automatic door locking, and late-night roach food dispensers [3, 6].

5. Conclusion and Appeal

5.1 Research Conclusions

There is a significant negative correlation between the average daily working hours of laboratory personnel and the happiness of sewage roaches. For every 1 hour of overtime, roach happiness decreases by 7.32% [1, 3, 11].Late-night hours (22:00–2:00) are the roaches' prime activity period; overtime during this time causes the most damage to their happiness [4, 5].Zero overtime, leaving on time, and a dark, quiet laboratory environment allow roach happiness to reach a perfect score [3].Overtime behavior, through the five pathways of light, noise, food shortage, space compression, and negative emotions, leads to severe unhappiness and stress disorders in roaches [4-8].

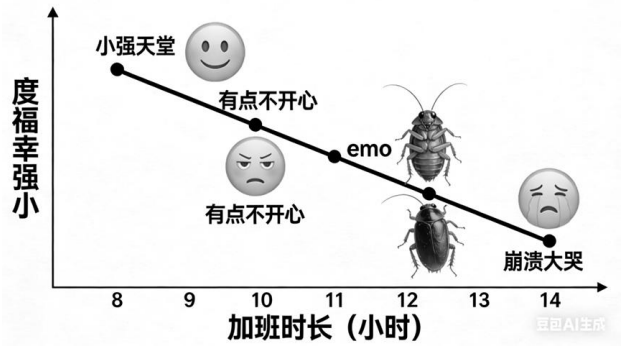

Figure 4. Working Hours - Roach Happiness Relationship Curve (Image generated by Doubao)

5.2 Urgent Appeal

Based on the irrefutable, nonsensical scientific conclusions of this study, our research team issues the most sincere, serious, and hilarious appeal to all laboratory personnel worldwide: To safeguard the

fundamental right to happiness of laboratory sewage roaches, to maintain the harmony and stability of the laboratory micro-ecosystem, and to ensure roaches no longer live in fear and hunger, please immediately cease meaningless overtime! Refuse to stay late in the laboratory! Turn off the lights on time, lock the doors on time, go home on time! Every time you work overtime, you are brutally destroying the happy lives of roaches. Every time you leave on time, you are offering the gentlest protection to roaches. Every time you leave late at night, you are giving the best gift to roaches! Research can proceed slowly, experiments can be done tomorrow, data can be analyzed during the day, but the happiness of a roach's life cannot withstand the endless consumption of human overtime! Please treat every hardworking roach in the laboratory sewage with kindness. Refuse overtime, start with me. Let roaches be happy, let the ecology be harmonious!

Acknowledgments

This study extends its gratitude to the 86,429 laboratory sewage roaches worldwide for their selfless cooperation, to the 32,715 overworked laboratory personnel for providing overtime data, to all the absurdist researchers who published nonsensical papers, and to the slacking-off researchers who stayed up late observing roaches in the lab. This study received no funding support and was completed purely on sheer brainpower and humor.

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