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Veterinary Clinical Communication Education & Research

Dr. Elpida Artemiou, PhD, Professor of Veterinary Communications,
Texas Tech University, United States

Dr. Christin Kleinsorgen, Master of Veterinary Education,
University of Veterinary Medicine, Hannover, Germany



Meet Our Presenters



Elpida Artemiou, PhD
Professor of Veterinary Communication
Teacher, scientist, editor, learner, collaborator
Runner, swimmer, gardener
Passionate about all sentient beings &
mindfulness practice



Dr. Christin Kleinsorgen, (DVM)
Master of Veterinary Education
Consultant, administrator, teacher,
scientist, learner, collaborator
Mountainbiker, hiker

Agenda

- Introductions
- Philosophy & Historical Perspectives
- Communication Curricula
- Research & Publication
- Final Thoughts & Questions





Our Philosophy



In clinical communication we have to attend and educate the whole person and the job of the teacher is to create a safe learning environment for learners to challenge their own skills and enhance their competencies to become both an effective, confident and compassionate clinician.

임상 의사소통에서는 전체적인 사람을 돌보고 교육해야 하며, 교사의 역할은 학습자들이 자신의 능력을 시험하고 향상시킬 수 있도록 안전한 학습 환경을 조성하는 것입니다. 이를 통해 학습자는 효과적이고 자신감 있으며, 자비로운 임상의로 성장할 수 있습니다.



Evolution of Veterinary Communication Curricula



- **Initial Emphasis on Technical Skills**
 - Focus on medical knowledge, physical exams, critical thinking and problem solving.
- **Shift in the Late 20th Century**
 - Communication skills became a core competency, essential for accreditation.
- **AVMA CoE Standards 9 & 11**
 - ...opportunities for students to learn how to acquire information from clients (e.g., medical history) and about patients (e.g., medical records), to obtain, store and retrieve such information, and to communicate effectively with clients and colleagues...
- **EAEVE Standards 3 (Curriculum) & (Facilities and equipment)**
 - ...Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.

Communication skills: Equally or more important than clinical knowledge

Enhanced communication fosters more effective veterinarian-client consultations, leading to:

- Improved outcomes of care
- Increased accuracy
- Enhanced efficiency
- Increased adherence
- Improved veterinarian/client satisfaction
- Reduced conflicts, complaints, and malpractice claims



Key Assumptions in Communication Curricula

- Communication as a Core Clinical Skill
 - Integral to effective veterinary medicine
- Communication as a Learned Skill
 - Mastered through structured learning and experiential practice.
- Experience Alone is Insufficient.
 - Experience may reinforce bad habits without appropriate guidance.

Communication Skills Domains

Professional Collaboration:

Team communication, handling medical records, correspondence, and presenting in rounds.

Self-Communication:

Enhancing clinical reasoning, self-awareness, reflection, managing biases, and promoting wellness.

Remote Communication:

Mastering telephone consultations, telemedicine, and online interactions.

Health Promotion & Prevention:

Leveraging media, social platforms, public speaking, and influencing health policy.

Key communication issues:

Culture, ethics, end of life decisions, malpractice, and ethical considerations.

Veterinary-client interactions:

History taking, shared decision making.

Human-animal bond (HAB):

Effective communication across species, understanding animal behavior.





Current State of Veterinary Communication Curricula



- Integration into Core Curriculum
 - Communication skills as a central component in competency-based education.
- Teaching methods:
 - **Experiential Learning:** Role play, simulated clients (SCs), and structured feedback sessions.
 - **Appropriate Repetition:** A helical, hands-on method for deeper learning.
 - **Conceptual Frameworks:** Incorporation of models like the Calgary Cambridge Guide (CCG), SEGUE framework, the Maastricht MAAS Global, Motivational Interviewing (MI)
- Assessment methods:
 - **Varied Evaluation Techniques:** MCQs, skills-spotting, reflection, Objective Structured Clinical Examination (OSCE)



Practical Application



- Emerging Teaching Methodologies:
 - Flipped classrooms and interactive, student-centered learning.
 - Engagement in inter-professional education and collaboration.
- Technology Integration
 - Utilization of online platforms to enhance communication training.
 - Implementation of virtual simulations and AI-powered training tools.
- Development of Assessment Strategies
 - Promote the learning function of assessment.

SPECIAL TOPIC: EDUCATIONAL THEORY AND PRACTICE

Measuring the Effectiveness of Small-Group and Web-Based Training Methods in Teaching Clinical Communication: A Case Comparison Study

Elpidia Artemiou ■ Cindy L. Adams ■ Andrea Vallevand ■ Claudio Violato ■ Kent G. Hecker

ABSTRACT

Current teaching approaches in human and veterinary medicine across North America, Europe, and Australia include lectures, group discussions, feedback, role-play, and web-based training. Increasing class sizes, changing learning preferences, and economic and logistical challenges are influencing the design and delivery of communication skills in veterinary undergraduate education. The study's objectives were to (1) assess the effectiveness of small-group and web-based methods for teaching communication skills and (2) identify which training method is more effective in helping students to develop communication skills. At the Ross University School of Veterinary Medicine (RUSVM), 96 students were randomly assigned to one of three groups (control, web, or small-group training) in a pre-intervention and post-intervention group design. An Objective Structured Clinical Examination (OSCE) was used to measure communication competence within and across the intervention and control groups. Reliability of the OSCEs was determined by generalizability theory to be 0.65 (pre-intervention OSCE) and 0.70 (post-intervention OSCE). Study results showed that (1) small-group training was the most effective teaching approach in enhancing communication skills and resulted in students scoring significantly higher on the post-intervention OSCE compared to the web-based and control groups, (2) web-based training resulted in significant though considerably smaller improvement in skills than small-group training, and (3) the control group demonstrated the lowest mean difference between the pre-intervention/post-intervention OSCE scores, reinforcing the need to teach communication skills. Furthermore, small-group training had a significant effect in improving skills derived from the initial phase of the consultation and skills related to giving information and planning.

Key words: communication skills, veterinary clinical communication, web-based instruction, small-group teaching, Objective Structured Clinical Examination, Calgary-Cambridge Guide



Practical Application: AI- SCs & Trigger Simulations



Velma

A creative GPT that creates client profiles and scripts for vet student practice.



Jamal Richardson

An AI-SC that is set to strictly portray a client visiting a veterinary clinic with his dog, Max.



Dr. Wisdom

A GPT that gives constructive feedback and recommendations on interviews conducted by veterinary students. Based on the Calgary-Cambridge Guide.





Case Study: Texas Tech University School of Veterinary Medicine (TTU SVM)

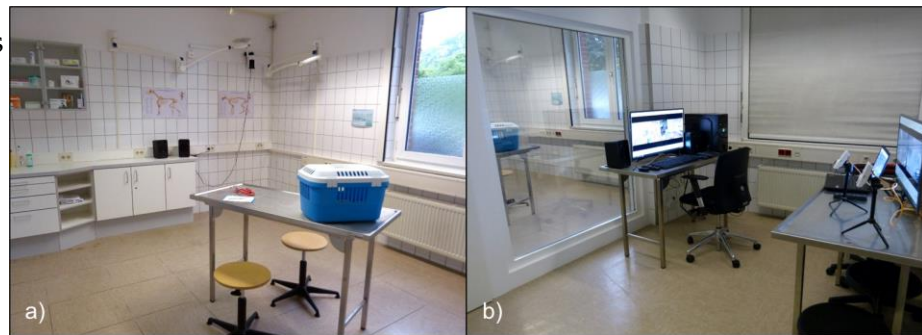


- **Program Structure:**
 - A 4-year program with 18-week semesters in fall and spring.
 - Six pre-clinical semesters followed by a one-year of clinical practice.
- **Communication Skills integration:**
 - Embedded across all pre-clinical semesters within the Clinical & Professional Skills Program (CPS).
 - Each semester includes 3 hours of student-centered presentations and 9 hours of hands-on practice with simulated clients (SCs).
 - CPR elective communication.
- **Student Participation:**
 - Involvement in 69 SC encounters, with 18 as the lead learner.
 - Engagement in community outreach programs.
- **Assessment Framework:**
 - Completion of 1 formative OSCE-sem 1, Summative OSCE (small-sem2 and food animal 5), skill-spotting exercises-sem3, reflective exercise-sem 4, and a 3-day 13-station integrated summative OSCE-sem 6.
- 10-rooms with a central conference facility, reception area and technical room.
- Team of 20 Simulated Clients.



Case Study: University of Veterinary Medicine Hannover (TiHo Hannover)

- **Program Structure:**
 - A 5 ½ -year program with 14-week semesters in fall and spring.
 - Four pre-clinical semesters, four clinical semesters, followed by one-year of clinical practice, and one semester of exams.
 - Several elective subjects (Basics, Anamnesis, Breaking Bad News, Euthanasia, Interprofessional Communication)
- **Communication Skills integration: (no legal framework, yet)**
 - Embedded in professional studies across two pre-clinical semesters (1st and 2nd), integration in propaedeutics (5th semester), practical year (9th and/or 10th semesters)
 - Courses include 2-4 hours of student-centered presentations and 2-4 hours of hands-on practice with simulated clients (SCs).
- **Simulated Clients:**
 - Costs: 'volunteers' of lay actors (approximately 100 €/hour).
 - Trained and prepared for standardized simulations.
- **Assessment Framework:**
 - Completion of 1 formative OSCE



Opportunities for improvement

- Enhancing Training programs:
 - Expand and diversify communication scenarios for more comprehensive learning.
- Faculty & Simulated Client Development:
 - Strengthen facilitator and coaching skills through targeted training programs.
- Investing in a Communication Suite and Technology:
 - Building flexible learning spaces equipped with examination and observations rooms, and simulation software.
- Research and Innovation:
 - Drive continuous improvement through dedicated research and innovative practices in veterinary communication.

Paper

Paper

Standardised clients as assessors in a veterinary communication OSCE: a reliability and validity study

E. Artemiou, C. L. Adams, K. G. Hecker, A. Vallevand, C. Violato, J. B. Coe

In human medicine, standardised patients (SP) have been shown to reliably and accurately assess learners' communication performance in high-stakes certification Objective Structured Clinical Examinations (OSCE), offering a feasible way to reduce the need for recruitment, time commitment and coordination of faculty assessors. In this study, we evaluated the use of standardised clients (SC) as a viable option for assessing veterinary students' communication performance. We designed a four-station, two-track communication skills OSCE. SC assessors used an adapted nine-item Liverpool Undergraduate Communication Assessment Scale (LUCAS). Faculty used a 21-item checklist derived from the Calgary-Cambridge Guide (CCG) and a five-point global rating scale. Participants were second year veterinary students ($n=96$). For the four stations, intrastation reliability (α) ranged from 0.63 to 0.82 for the LUCAS, and 0.73 to 0.87 for the CCG. The interstation reliability coefficients were 0.85 for the LUCAS and 0.89 for the CCG. The calculated Generalisability (G) coefficients were 0.62 for the LUCAS and 0.60 for the CCG. Supporting construct validity, SC and faculty assessors showed a significant correlation between the LUCAS and CCG total percent scores ($r=0.45$, $P<0.001$), and likewise between the LUCAS and global rating scores ($r=0.49$, $P<0.001$).

Study results support that SC assessors offer a reliable and valid approach for assessing veterinary communication OSCE.

- Barriers to communication skills training:
 - Limited curriculum time dedicated to communication training.
 - Insufficient time and resources to support comprehensive learning.
 - Inconsistent faculty expertise in delivering communication education.
 - Motivation to change the role modelling of effective communication skills.



Research: Observation



Instruction: Please Smile

Please Smile

por favor sonr e

Bitte l cheln

s'il te pla t, souris



웃어주세요

笑ってください

กรุณายิ้ม

Tolong tersenyum



Expectations of the observation



Expectations of the observation

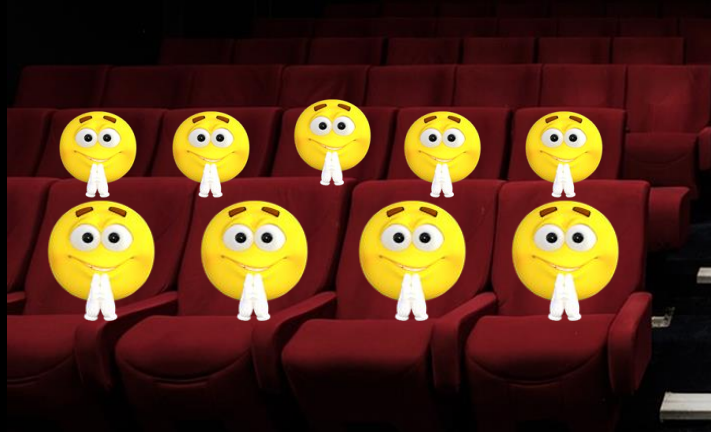
Group 1

Group 2

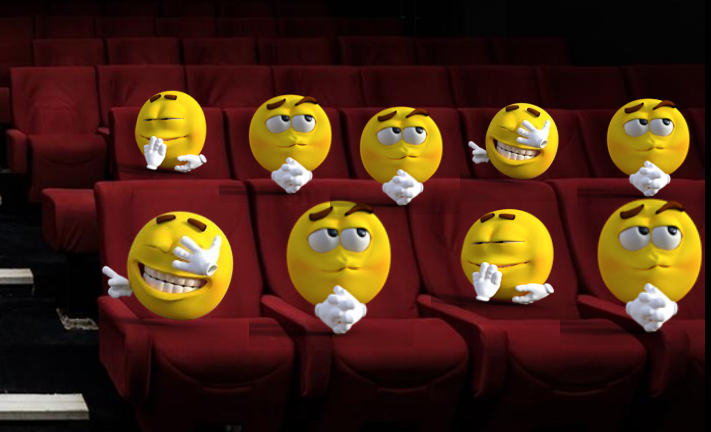


Expectations of the observation

Group 1

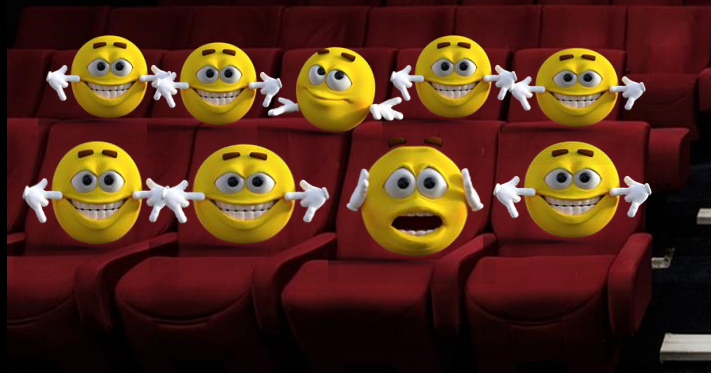


Group 2

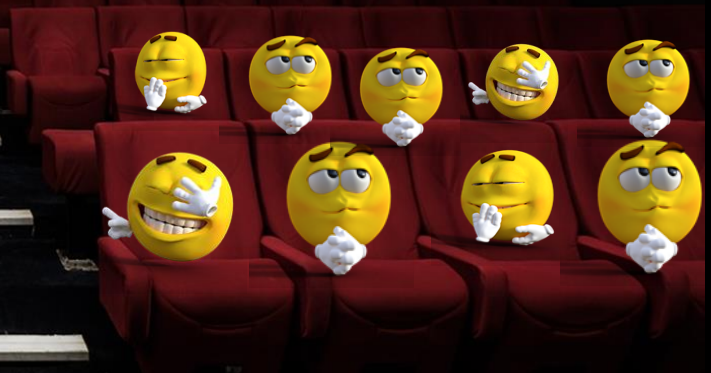


Expectations of the observation

Group 1

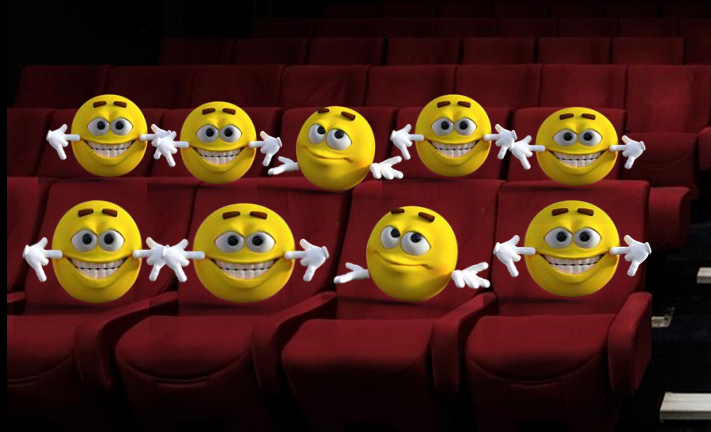


Group 2

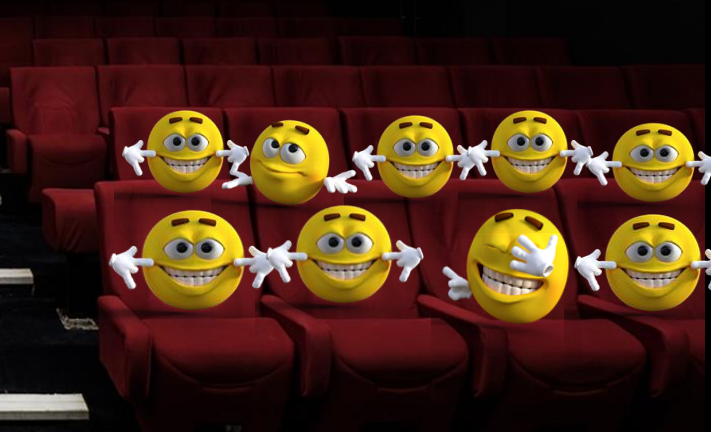


Expectations of the observation

Group 1



Group 2



Results of the observational experiment:

- My observations
- vs. expected results
- Your observations

"I don't know what just happend, but I feel happier now."

"They were all smiling, so I also smiled."

"Something changed, there suddenly was a joyful atmosphere"

"I often remember your instruction, it showed me how powerful a smile or good mood is."

- Identifying a research topic and formulating a research question
- Collaboration in Veterinary Educational Research
- Searching the Literature (beyond veterinary)
- Designing a Study (Quant | Qual | Mixed | etc.)
- Research ethics and ethical approval for a study
- Recruiting and managing study participants
- Data management and statistical analysis
- Dissemination of research findings



Veterinary Educational Researcher's Handbook



Hunt, Julie, et al. "Veterinary Educational Researcher's Handbook." EdArXiv, 16 June 2022. Web.
<https://osf.io/preprints/edarxiv/dn6e2>

Authors:

Julie A. Hunt, Sarah Baillie, Megan Thompson, Mirja Ruohoniemi, Victoria Phillips,
Manuel Boller, Waraporn Aumarm

The process of research



- Dissemination as a key part of the research process
 - Building a research profile
 - Contribution to educational evidence
- Formats:
 - Conference presentations
 - Manuscripts, book Chapters
 - Peer review processes
 - Open educational resources



am
Article
Measur Learning
Sylvia Agneta C

Project Re Evalu Focus
Sylvia Agneta C

Rauch et al. BMC Medical
https://doi.org/10.1186/s12916-024-01422-2

RESEARCH
Interprof skills in v education
Michele Rauch¹ Vivier²

Abstract
Background: Com higher educational assistants, including veterinary medicine professions. Therefo knowledge regardi
Methods: To expli skills and interprofe (higher educational) Germany.
Results: In total, 29 participated. The m, their everyday work more than half ad respondents (n = 29 were convinced th the team (92.29% n training.
Conclusions: Result professional life. Stu The findings indic
Keywords: Commu Professional skills te

* Correspondence: Michele Rauch
m.rauch@vetmed.uni-hannover.de
1Tierärztliche Hochschule Hannover, Center for Learning, Dohle Str. 1, 30559 Hannover, Germany
2Ross University School of Veterinary Medicine, 301 College Ave., North Duxbury, MA 01922, USA
Full list of author information is available at the end of the article



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frontie

Article Out Infl Com
Mahtab Ting-Ti

Use of Ac in Veterin
Michele Rauch¹ Vivier²

Abstract
Using simulated clients is to evaluate the use of, the size of score was use who trained their commu assessment with regard to communication skills. A c comparison of actors and Despite the lack of objec an opportunity to learn a veterinary training. Chang and reactions and greg students and graduates in

Introduction
Communication is an unav in a veterinarian's profes number of pet-owning pets as family members, p ary services have expande animal bond has a strong it. When asked to name the their veterinarian, pet ow and respectful inform ents of their choice. Com between evidence-based me personality and can theref of a veterinarian and are i medical knowledge and m Communication is cen for veterinarians and vet work. In a review of 4 2015, improving commu tion was suggested, as m peered that undergrad adequate and therefore di their profession.^{1,2} It is pa deal with demanding pet and to communicate comp as euthanasia.³⁻⁷ In addi with the complexity of emotional intensity where c This is underlined by the against veterinarians are b

* Correspondence: Michele Rauch
m.rauch@vetmed.uni-hannover.de
1Tierärztliche Hochschule Hannover, Center for Learning, Dohle Str. 1, 30559 Hannover, Germany
2Ross University School of Veterinary Medicine, 301 College Ave., North Duxbury, MA 01922, USA
Full list of author information is available at the end of the article



PAPER
Mind-body therapies: an intervention to reduce work-related stress in veterinary academia
Elipida Artemiou,¹ Gregory E Gilbert,^{2,3} Anne Callanan,¹ Silvia Marchi,⁴ Don R Bergfeld⁵

Abstract
Studies investigating perceived stress and mindfulness awareness support mind-body therapy (MBT) effectiveness in reducing stress and anxiety and, thus, has potential to decrease work-related stress. A pre/post-experimental design involved 30 faculty and staff working at Ross University School of Veterinary Medicine, Saint Kitts and Nevis, who experienced a two-day MBT intervention programme. An additional 16 faculty and staff not involved in MBT who went about their daily work schedules served as control group. Demographics, Perceived Stress Scale 10 (PSS-10), Mindful Attention Awareness Scale (MAAS), 16 Personality Factor (16PF) Openness to Change subscale and saliva cortisol concentrations were analysed. Control participants reported significantly perceived less stress (PSS-10: M=13; sd=1.4) than intervention participants (M=20; sd=6.6) during pretest. However, at post-test the intervention group reported a significant decrease in perceived stress (M=11; sd=6.0). MAAS pretest results indicated the intervention group displayed a lower average score (M=54; sd=15.3) than control participants (M=68; sd=2.0). Post-MAAS intervention scores showed improvements in mindfulness (M=63; sd=15.3). Correlations between the 16PF Openness to Change subscale and MAAS were r=0.03 and r=-0.17 for the intervention and control groups, respectively. Mean concentrations of saliva cortisol indicated a larger and significant decline in cortisol for the intervention group both during day 1 (P=0.0008) and day 2 (P=0.0008). In conclusion, these preliminary results provide support that MBTs in veterinary academia can improve psychological and physiological aspects of personal wellbeing.

Introduction
While stress is a construct subject to numerous definitions it is generally accepted as psychological and/or physiological result of high external and/or environmental demands compared with limited resources.¹ The impact of workplace stress for an organisation and society is evident with lowering productivity and job satisfaction; thus, increasing employee turnover and healthcare costs.¹ Workplace stress has been associated with absenteeism and mental and emotional problems resulting in 40 million lost workdays annually.^{1,2} At the individual's level, evidence suggests employees experience high levels of stress, anxiety, anger, depression, fatigue, abnormal sleep behaviour and burnout, all due to job stress.³ Specifically, in human medicine, general practitioners, as well as specialist physicians, report a demanding workload, imposed administrative obligations, declining autonomy and time spent with patients, all contributing to decreasing personal wellbeing, professional satisfaction as well as patient care.^{4,5} Physicians in academia experience heightened challenges considering increased clinical responsibilities and competing time commitments between teaching, research and administrative duties.⁶ Likewise, veterinary professionals report experiencing increased levels of work-related stress. Contributing factors include the complexity of the veterinarian-client relationship, difficult colleague interactions, high expectations in the delivery of care and support of the human-animal bond, long working hours, lack of resources, low earnings, challenges in providing quality care while meeting clients' financial expectations, inherent challenges of euthanasia consultations, difficulties in maintaining a work-life balance and personal relationships.⁶⁻¹²

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Department of Clinical Sciences, Ross University School of Veterinary Medicine, Basseterre, Saint Kitts and Nevis
E-mail for correspondence: emilias@rossvet.edu.kn
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