

Authors (Year)	Concept of leadership	Target group and group size Duration	Content of training of leadership skills	Evaluation design	Reported trainings effects
Devaul RA, Knight JA, Edwards KA (1994)	Leadership as constant process to convey clearance, to take responsibility and act courageously	<ul style="list-style-type: none"> – Training of leadership skills – Target group: medical students – Duration: four-year program with 1 hour/week 	<ul style="list-style-type: none"> – 1st year: group discussions with guest speakers – 2nd year: mentoring program – 3rd year: workshops and exercises for task analysis and self reflection – 4th year: supervision and exchange with experienced leaders 	Non reported	Long term effects assumed, no effects reported
Wipf JE, Pinsky LE, Burke W (1995)	None reported (<i>Content of training: Goal-and role clarification, effective Leadership of workshops, give feedback, control results, define gratification criteria, communication</i>)	<ul style="list-style-type: none"> – Training of teaching and leadership skills – Target group: Residents – Duration: 6 hours with 3x2-hourly Sessions; 1 Session for leadership skills 	1 Session for 2 hours: <ul style="list-style-type: none"> – Group discussion on leadership skill case – Group discussion of a ward-round case – Role play 	Posttest: Satisfactory questionnaire	High satisfaction ($M = 4.2 - 4.5$; $1 = poor$; $5 = excellent$)
Lee MT, Tse AM, Naguwa GS (2004)	None reported	<ul style="list-style-type: none"> – Workshop for Team and leadership skills – Target group: Residents ($N=10$) – Duration: 3 hours 	<ul style="list-style-type: none"> – Contents: Team management, leadership of discussions, Leadership of younger Residents – Implementation with role plays, group discussions, self-reflections 	Pre- and posttest: Questionnaire to assess self-efficacy	<ul style="list-style-type: none"> – Significant increase of self efficacy in team management, leadership of discussions and leadership of younger residents – Increase in leadership and communication skills – Rating of the workshop as being very helpful
Stoller JK, Rose M, Lee R, Dolgan C, Hoogwerf BJ (2004)	None reported (<i>Focus on good work together in the team and with colleagues</i>)	<ul style="list-style-type: none"> – Training on teamwork und leadership skills – Target group: Residents ($N=32$) – Duration: 1 day 	<ul style="list-style-type: none"> – Simulation on team development – Discussion on leadership principles and the theory of Kouzes & Posner on transformational leadership – Simulation through game of Pictionary 	Pre- und posttest: Questionnaire <ol style="list-style-type: none"> 1) On efficacy of training 2) On leadership skills in general 	<ul style="list-style-type: none"> – High efficacy of training (significant increase in estimated utility) – Significant increase in awareness of leadership principles
Awad SS, Hayley B, Fagan SP, Berger DH, Brunicardi FC (2004)	Leadership skills as successful influence in the framework of good teamwork through communication,	<ul style="list-style-type: none"> – Training of leadership skills within the regular curriculum – Target group: Residents (no numbers reported) – Duration: within (80-hourly) weekly working time (no more specific data on 	<ul style="list-style-type: none"> – effective time management – high-quality patient care – collaborative leadership understanding (focus: coordination, communication, integrity) 	Pre- and Posttest: „Internal Strength Scorecard Survey“: Questionnaire to assess leadership skills (Coordination, kommunikation, integrität) <ul style="list-style-type: none"> – Pretest 6 months before begin 	Increase in leadership skills: <ul style="list-style-type: none"> – Coordination (13% increase) – Communication (12% increase) – Integrity (12% increase)

Authors (Year)	Concept of leadership	Target group and group size Duration	Content of training of leadership skills	Evaluation design	Reported trainings effects
	participation and integrity	trainings duration)		of training – Posttest directly after training	
Smith KL, Petersen DJ, Soriano R, Friedman E, Bensinger LD (2007)	None reported (<i>assessed items: define goals, know stakeholders and know organizational strengths and weaknesses</i>)	– Training of teaching and leadership skills – Target group: medical students (N=23) – Duration: 1 week (6-8 hours daily) –	–two leadership workshops with discussion of effective leadership principles –four sessions on project development and implementation (focus: strategic planning, negotiation, coalition building) –Presentation of teaching projects	Posttest – Questionnaire of teaching effectiveness – Questionnaire on leadership effectiveness – Each baseline and increase estimation – Long-term assessment of teaching project development (11 months after end of training, N=13)	– Increase of mean teaching effectiveness (M=4.50; 1 = <i>strongly disagree</i> , 5 = <i>strongly agree</i>) – Increase of mean leadership effectiveness, i.e. goal-setting (M=4.52; 1 = <i>strongly disagree</i> , 5 = <i>strongly agree</i>) – Success of teaching projects – Wish for sustainability of the training
Levine SA, Chao SH, Brett B, et al. (2008)	None reported (<i>assessed items: Feedback behavior, team leadership, conflict-solving within an interdisciplinary team, management of diverse responsibilities</i>)	– Training of professional, teaching and leadership skills – Duration: 2-day project work in three cohorts – Target group: chief residents (N=46) – Trainers of leadership skills: faculty members	20 minute interactive workshop on leadership skills within geriatric case example (focus: implementation of professional competence)	Pretest: Questionnaire on confidence in own leadership skills Posttest: Questionnaire on gain in knowledge on leadership skills	– Mean confidence (M = 3.63; SD = .55; 1 = <i>not at all</i> , 5 = <i>very much</i>) – Gain in knowledge on leadership skills (M = 4.30; SD = .61; 1 = <i>not at all</i> , 5 = <i>very much</i>)
Ciampa E, Hunt AA, Arneson KO, Mordes DA, et al. (2011)	Effective leadership behavior includes self leadership, an understanding of the group consideration of the specific task contexts Leadership skills comprehend: motivation of others, give feedback, coaching and understand conflicts	– Interactive workshop on development of leadership skills – Target group: MD/PhD students (N = 59, 3 cohorts) – Duration: 2 Days	–Direct instruction –Experiential learning –9 Case Studies	Posttest: Questionnaire on Quality of workshops relating to organization and content (i.e. „This component was well organized and executed“; „This component included relevant concepts and skills“)	Quality of workshops M = 3.3 - 4.7 (1 = <i>strongly disagree</i> ; 5 = <i>strongly agree</i>)

Tab 3.: Comparison of the content of the publications included