Start the Way You Want to Finish: An Intensive Diversity, Equity, Inclusion Orientation Curriculum in Undergraduate Medical Education

Denise L. F. Davis^{1,2}, DoQuyen Tran-Taylor¹, Elizabeth Imbert¹, Jeffrey O. Wong³ and Calvin L. Chou^{1,2}

¹University of California San Francisco, San Francisco, CA, USA. ²Veterans Affairs Healthcare System, San Francisco, CA, USA. ³University of Colorado, Boulder, CO, USA.

Journal of Medical Education and Curricular Development Volume 8: 1–6 © The Author(s) 2021 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/23821205211000352



ABSTRACT

PROBLEM: Medical students often feel unprepared to care for patients whose cultural backgrounds differ from their own. Programs in medical schools have begun to address health: inequities; however, interventions vary in intensity, effectiveness, and student experience.

INTERVENTION: The authors describe an intensive 2-day diversity, equity, and inclusion curriculum for medical students in their orientation week prior to starting formal classes. Rather than using solely a knowledge-based "cultural competence" or a reflective "cultural humility" approach, an experiential curriculum was employed that links directly to fundamental communication skills vital to interactions with patients and teams, and critically important to addressing interpersonal disparities. Specifically, personal narratives were incorporated to promote individuation and decrease implicit bias, relationship-centered skills practice to improve communication across differences, and mindfulness skills to help respond to bias when it occurs. Brief didactics highlighting student and faculty narratives of difference were followed by small group sessions run by faculty trained to facilitate sessions on equity and inclusion.

CONTEXT: Orientation week for matriculating first-year students at a US medical school.

IMPACT: Matriculating students highly regarded an innovative 2-day diversity, equity, and inclusion orientation curriculum that emphasized significant relationship-building with peers, in addition to core concepts and skills in diversity, equity, and inclusion.

LESSONS LEARNED: This orientation represented an important primer to concepts, skills, and literature that reinforce the necessity of training in diversity, equity, and inclusion. The design team found that intensive faculty development and incorporating diversity concepts into fundamental communication skills training were necessary to perpetuate this learning. Two areas of further work emerged: (1) the emphasis on addressing racism and racial equity as paradigmatic belies further essential understanding of intersectionality, and (2) uncomfortable conversations about privilege and marginalization arose, requiring expert facilitation.

KEYWORDS: Communication skills, cultural humility, cultural competence, diversity

RECEIVED: December 22, 2021. ACCEPTED: February 15, 2021.

TYPE: Original Research

FUNDING: The author(s) received no financial support for the research, authorship, and/or publication of this article.

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article

CORRESPONDING AUTHOR: Calvin L. Chou, University of California San Francisco and Veterans Affairs Healthcare System, 4150 Clement Street (111), San Francisco, CA 94121, USA. Email: calvin.chou@ucsf.edu

Introduction

The social responsibility of health care professionals in addressing racism has been recently highlighted by student activism, represented most explicitly in the United States by the #whitecoats-4blacklives movement. However, ample literature demonstrates persistent health disparities, leading to poor health and early mortality for marginalized groups. 1-5 Complicating the problem, many physicians lack training that addresses interpersonal and structural dimensions of inequity. This shortcoming begins in medical school, where students often feel unprepared to provide care for patients whose cultural backgrounds differ from their own.⁶ Some medical schools have incorporated courses addressing cultural diversity, though there appears to be significant variability around the definition of "cultural diversity" and the elements necessary to improve training.⁷ One method of teaching about diversity, a "cultural competence" approach, includes factual knowledge about different groups but may also reinforce stereotyping.8 Competence implies that the experiences of historically marginalized groups

can be fully known by physicians and centers the perspectives of socially dominant groups in a potentially disrespectful way. Humility realistically emphasizes how social privilege often blinds individuals to both the historical, interpersonal, and system experiences of underrepresented and subjugated groups. An approach of cultural humility emphasizes a self-reflective process to heighten awareness of one's own background and biases, coupled with holding systems accountable.^{9,10}

Like all people, physicians are vulnerable to implicit bias, an unconscious, internalized, favorable or unfavorable set of views of particular social groups that strongly influences relationships with patients and members of the health care team. 11,12 Black patients, in particular, report fewer patient-centered behaviors from clinicians with higher levels of implicit bias. 12 This is noteworthy because patient-centered communication is associated with improved outcomes including diabetes control, adherence, and loyalty. 12 Without personal awareness, as well as interpersonal and structural mitigation strategies,

Table 1. Objectives and activities in Differences Matter Orientation.

Develop a basic understanding of the UCSF culture of equity Build personal and professional relationships with peers and faculty in ways that explore and respect differences Articulate how relationship-centered communication (RCC) improves safety and quality in healthcare and can reduce disparities in healthcare, teamwork, and medical education Name how social determinants of health affect patient outcomes, and begin to plan actions that ally with patients and families Describe a holistic framework with which to explore health disparities Activities Welcome: why we are focusing on communication across differences? The art of introductions and "speed meeting" Health disparities didactic Introduction to communication skills Small group introductions activity and ground rules Eliciting social-cultural history Small group social-cultural history activity

unconscious bias may negatively affect medical education, team function, and clinical care. Studies across US medical schools have shown that communication across cultural differences, increased awareness of one's background and personal values, and exposure to people of different backgrounds prepare students to care for patients from diverse backgrounds. 13,14 Additionally, adverse learning environments negatively affect the well-being of underrepresented minority (URM) medical students when bias is more frequently reported. 15,16 Communication skills for equity remain undertaught, perhaps because such trainings disrupt a narrative that physicians are free from bias.¹¹ Therefore, some learners may disparage such training as "political correctness." 7,17 Educators leading diversity curricula in medical schools also frequently encounter the perception of competition with biomedical learning, which often holds higher implicit value ("soft" vs "basic" science).

Small group social identity wheel and understanding our limitations

Mindfulness and microaggressions demo and debrief

Privilege didactic and writing exercise

In 2014, the #whitecoats4black lives organization staged a multi-racial, inter-professional "die-in" on the campus of the University of California San Francisco (UCSF) that galvanized the attention of students and faculty to the violent deaths of African American and Latinx people in confrontations with law enforcement. School of Medicine (SOM) leaders noticed and committed resources to launch an unprecedented curricular and institutional change to address diversity, equity, and inclusion (DEI). Here, the authors describe the Differences Matter Orientation (DMO), a program run for 5 years for matriculating first-year students to increase awareness and to provide skills training in DEI before the introduction of any other curricular content.

Setting and Participants

Beginning in August 2015, in the week prior to the start of formal classes, during their standard orientation to our public US medical school, all matriculating first-year medical students have undergone a mandatory, 2-day interactive workshop emphasizing DEI. Thus far, 615 students have completed the orientation activities. Students and faculty gather in a conference center with facilities for plenary sessions and 28 small breakout groups. Meals are provided (in non-pandemic times) to avoid distractions and foster cohesiveness.

Program Description

Though the intended approach is to be inclusive of all groups, given the well-documented disparate health outcomes for Black, Native American, and Latinx patients, the curriculum focused on race and health as the paradigmatic example of these conversations.

Objectives for DMO encompass investigation of both interpersonal and structural realms of equity. Personal narratives about identities and centering the importance of sociocultural factors in healthcare and medical education are outlined. In naming the institutional culture of equity and framing students' mission to reduce structural health disparities, the orientation clearly targets equity. Additional details about objectives are available in Table 1. DMO comprises 3 pillars of learning: personal narratives, relationship-centered communication (RCC), and upstander training. Rather than using a knowledge-based "cultural competence" or a reflective "cultural humility" approach,

Davis et al. 3

Table 2. Relationship centered skills in differences matter orientation.

Creating rapport
Warm greeting
Use preferred names, roles, and titles
The importance of non-verbal communication
Ensure comfort and address privacy
Social talk: "small talk before big talk"
2. Eliciting the other's perspective and responding with empathy
Asking open-ended questions
Active listening
Responding with empathic statements
3. Applying grace notes for communicating across differences
Additional experiential training was offered to help students address negative stereotypes about marginalized identities through an appreciative inquiry approach. Students were invited into a conversation with one of their small group members using the following prompts:
"I've learned that people's backgrounds have a great deal to do with health, healthcare and education. I'd like to hear whatever you feel comfortable telling me about what you feel proud of related to your background."
"What might you feel comfortable sharing with me about a challenge you've had related to your background?"
Given that implicit bias causes blind spots, students were also offered the opportunity to explore their limitations by eliciting feedback from a peer with the invitation:
"As astudent identifying as, I think I understand what you are describing, but what might I be missing?"

an experiential curriculum was selected that links directly to fundamental communication skills, consistent with evidence that behaviorally-based training increases knowledge and changes attitudes more effectively than efforts aimed solely at personal awareness of bias. 10,18,19 Students attend plenary sessions in which more senior medical students share personal narratives and reflections on their experiences in DMO and critical experiences with equity and inequity during their clerkships. Didactics by experts on communication in healthcare are followed by small group meetings for three 60 to 90 minute sessions, during which all students practice communication skills for equity and inclusion with their peers. Skills include introductions by name and role, addressing others by their preferred name, addressing privacy and comfort, asking open ended questions, and responding with empathy. In order to foster learning of these foundational skills, students are encouraged to self-assess and are also offered feedback by their peers and faculty coaches.

Personal narratives

Throughout DMO, presenters and participants share personal narratives, a process which may decrease bias through individuation, a cognitive process that reduces overly broad and biased assumptions of others, and increases perceptions that others are individuals. ²⁰ Senior students and faculty, intentionally selected to be predominantly URMs, share brief personal stories, including salient aspects of their identities, with the entire

class. Subsequently, in small groups, faculty coaches share their own personal narrative and then invite students to do the same, employing the communication skill principles taught and demonstrated during the didactics.

Communication skills

The skills portion of DMO adapts fundamental RCC to conversations about difference. RCC includes skills shown to improve patient experience, adherence, trust, and improved health outcomes. ²¹⁻²³ Students review studies demonstrating trends toward improved outcomes for minority patients when physicians receive communication skills instruction and coaching. ²⁴ In small groups, faculty coaches demonstrate RCC skills (Table 2) that foster a climate of respect and address communication barriers (including the need for interpreter services), skills that mitigate clinician verbal dominance, as well as the skillful use of open ended questions and responding with empathy. Students then practice these communication skills, aided by trained faculty facilitators. These are not simulations: students use their own experiences to share what they wish with their peers and faculty coach.

Responding to bias

Witnesses to mistreatment may struggle with finding effective ways to speak up for respect. Communication training to build

Table 3. Evaluation data for Differences Matter Orientation, 2015 to 2018.

THE DIFFERENCES MATTER ORIENTATION	2015 (N=125/154)	2016 (N=129/150)	2017 (N=150/153)	2018 (N=153/158)
Allowed me to get to know new classmates	4.51 (0.70)	4.23 (0.85)	4.23 (0.91)	4.41 (0.68)
Made clear the importance of diversity issues in medicine (K)	4.46 (0.83)	4.51 (0.61)	4.67 (0.62)	4.54 (0.60)
Helped me to better understand diversity concepts such as implicit bias and microaggressions (K)	Not assessed	4.39 (0.65)	4.39 (0.75)	4.32 (0.79)
Taught me specific skills to use in conversations about diversity (S)	4.18 (0.86)	4.23 (0.73)	4.19 (0.78)	4.42 (0.63)
Gave me strategies and language with which to respond to microaggressions (S)	Not assessed	4.05 (0.75)	3.91 (0.93)	4.05 (0.88)
Gave me insight about biases that I didn't know I had (A)	3.81 (0.95)	3.67 (0.9)	3.86 (0.85)	3.74 (0.92)

Students were asked to rate their level of agreement (1 = strongly disagree, 5 = strongly agree) with each of the statements as part of an evaluation of overall preorientation and orientation activities. The number of respondents is listed as a proportion of the number of students in the class. Responses are reported as mean (SD). Abbreviations: K, A knowledge goal is denoted as; S, skills; A, attitudes.

awareness of and skills to address expressions of bias is incorporated in DMO through mindfulness techniques, discussion of group norms that can address bias when it inevitably arises, as well as simulations. Because microaggressions, defined as common everyday slights targeting marginalized identities, are common and have a negative impact on learners, DMO also includes training on responding to these expressions of bias.²⁵ A brief didactic on coping with microaggressions through mindfulness practices begins this segment.^{26,27} Students then review a brief re-enactment of a microaggression experienced by a member of the UCSF community. Students employ mindfulness techniques and discuss these observations in their small groups before discussing actions that could be taken in the future to address bias.

For the pilot year, the design team sought faculty and staff with expertise in facilitating DEI conversations. In our SOM, as in many institutions, low numbers of URM faculty make selection of a diverse group of skillful facilitators challenging and important.8 Facilitators in the pilot represented diversity in terms of race, ethnicity, gender, sexual orientation, professional training, and practice setting. They included nurse midwives, educators, physicians, social workers, psychologists, and staff. In order to foster safety and trust, groups of 6 to 8 students were organized who would work together longitudinally in their pre-clerkship doctoring course. For years 2 to 4, a largescale curricular change occurred at UCSF, and SOM faculty coaches with expertise in medical education now guide students in longitudinal groups. Many of these coaches had never facilitated conversations about race, privilege, and power prior to orientation, and there were fewer than 10 URM physicians in the cohort of 56 faculty. Therefore, faculty development sessions currently require daylong trainings, in order to allow for in-depth preparation for facilitating the DEI curriculum.

After the pilot year, students reported that the emphasis on diversity in DMO did not continue into the remainder of the curriculum. UCSF's simultaneous adoption of a large-scale curriculum revision into pre-clerkship studies, with implementation of equity into all curriculum blocks allowed for a quick response. Themes introduced in DMO extended into the pre-clerkship clinical skills curriculum through two 3-hour facilitated small group sessions as well as curricular blocks titled "Health and the Individual" and "Health and Society," which provided a deeper exploration of social and structural dimensions of bias, health disparities, and resilience. These sessions focused on applying RCC skills to clinical encounters, communicating with patients first as people and expressing empathy for patients. Students also explored the importance of eliciting and listening to patient stories and revisited the concept of implicit bias and its negative effect on clinical care. During both sessions, students engaged in simulations with observation and feedback from facilitators and peers. Incorporating diversity concepts into the fundamental communication skills training that students receive for all patients further cements the message that any interaction can incorporate an equity perspective in an accessible and commonly used framework.

Program Evaluation

Students completed anonymous online evaluations in the 4 weeks after the orientation. Descriptive statistics were calculated. Two authors analyzed the qualitative data, identified themes, and discussed themes with a third author until reaching agreement. Our study received exempt status from the University of California San Francisco Institutional Review Board.

Quantitative student evaluations over the 4 years of the program have been consistently positive, especially in the domain of relationship building with peers. Given that sensitive topics about race, racism, power, and privilege were introduced, the positive relational experiences of a diverse group of students is interpreted as evidence of the program's strengths (Table 3). Students consistently gave slightly higher ratings for knowledge-based items (importance of diversity issues and understanding of concepts) than for skills or attitudes, though students' self-evaluation of skill development was consistently

Davis et al. 5

in the 4 to 5 range. Student narrative comments also reflect positive experiences in DMO and included the value of small group skills work, the opportunity to delve into this series of topics, reinforcement of the decision to attend UCSF, and gratitude for undergoing what students characterized as important work so early in medical school. Despite many who had familiarity with these concepts previously, applying them to their future profession and the active role they could take in improving patient care made the concepts even more relevant. A minority of students stated their hope to spend more time in their assigned small group, to extend discussion about differences beyond race, and, given the discomfort of a couple of faculty, for more facilitator training.

Discussion

An intensive DEI curriculum during medical school orientation that builds relationships between students and faculty with 2 important features: it includes, rather than ignores, race and other differences, and it makes clear that communication skills are foundational to promoting equity in health care and practicing medicine safely and effectively. The orientation program addresses the learning environment of URM students by the intentional inclusion and over-representation of Black and Latinx student speakers and faculty. Additionally, the orientation proactively prepares students for inevitable experiences of bias and offers skills and encouragement to all students and faculty to respond effectively when racism and other biases are encountered. The authors believe that this intervention is the first described in medical training to link conversations about DEI explicitly with fundamental communication skills training, and certainly is the first to do so in students' orientation to medical school, prior to any formal curricular content.

Though this approach may raise concerns that an experience so early in medical education has the potential to undermine the cohesion of a medical school class, we have found the opposite to be true. In skillfully opening conversations about extant differences in clinical encounters, physicians may allow patients the opportunity to be recognized as individuals with life stories and histories that are affected by cultural forces, bias, discrimination, and resilience. Similarly, medical students hope to be seen and respected as individuals with life experiences intimately related to race, ethnicity, gender, sexual orientation, and other characteristics. In fact, in a recent qualitative study, first-year medical students at 2 Canadian medical schools remarked on the complex social pressures that appear during orientation, especially with negotiating the dominant identity of medical professional, and how these pressures exposed diversity and inclusion dynamics from these very first days.²⁸ In teaching and modeling RCC skills, faculty can provide an environment that establishes a positive learning climate. At the same time, the orientation is an introduction requiring longitudinal practice and long-term follow-up.

Leonardo and Porter²⁹ noted that there are no safe spaces when talking about inequity, because traumatic experiences often persist in the minds of those engaged in the conversation.

Despite the careful design of DMO and DMO refresher sessions, some students struggled with the concept of social privilege as an advantage that is "given and not taken" and resulted in some students expressing irritation at being perceived as privileged. Many classmates reacted negatively to comments perceived as dismissive of the power of social privilege. Successful short-term interventions included one-on-one conversations with SOM leaders and an all-class meeting over lunch in which conversations about privilege and power were framed as threshold concepts that are difficult and important to master but take a great deal of time to integrate.

Limitations to generalizability include that our intervention occurs at a single school, and that students may have chosen our school for its explicitly stated mission of inclusion. However, inclusion and equity represent important goals for the practice of medicine, especially in the face of the numerous health disparities that persist.

In summary, this intensive 2-day program during first-year student orientation effectively introduces DEI concepts through experiential learning based in fundamental communication skills and is well-received. Current outcomes are limited to learner self-assessment of their skills and satisfaction. Next steps could include longitudinal assessment of students' doctoring skills vis-à-vis recognition of and addressing health disparities. While our curriculum design team recognizes that a single intervention such as DMO is unlikely to engender abiding change by itself, the authors aver that the attitudes that DMO fosters crucially contribute to further learning and skill development. Our challenge is now to more robustly evaluate the orientation, with one potential tool being the American Association of Medical Colleges Tool for Assessing Cultural Competence Training. The goal remains to sustain this successful intervention into clerkships and beyond: ongoing sensitivity to this topic relates to questioning the powerful status quo. Much work remains, but as Dr. Martin Luther King, Jr., said, "We are now faced with the fact that tomorrow is today. We are confronted with the fierce urgency of now."

Acknowledgements

We thank Karen Hauer, MD, PhD, Daniella Cordero, and the Education Works-in-Progress at the San Francisco VA Healthcare System for critically reading prior drafts of this work. We also are indebted to the whitecoats4blacklives movement, the UCSF Vice Chancellor for Diversity and Outreach Renee Navarro, and UCSF Executive Vice Dean for Education Catherine Lucey.

Author Contributions

DLFD, DQT, and CLC conceived and designed the work and also primarily analyzed and interpreted the data; EI and JW substantially helped with acquisition, analysis, and interpretation of data. All authors drafted, revised, and approved the article for publication.

REFERENCES

- Cooper LA, Roter DL, Smedley BD, Stith AY, Nelson AR. Patient-provider communication: the effect of race and ethnicity on process and outcomes of healthcare. In: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.* The National Academies Press; 2002: 552-593.
- Gonzalez AB, Salas D, Umpierrez GE. Special considerations on the management of Latino patients with type 2 diabetes mellitus. Curr Med Res Opin. 2011;27:969-979.
- White K, Haas JS, Williams DR. Elucidating the role of place in health care disparities: the example of racial/ethnic residential segregation. Health Serv Res. 2012;47:1278-1299.
- Centers for Disease Control and Prevention. CDC health disparities and inequalities report. MMWR. 2013;62:3-5.
- Carnethon MR, Pu J, Howard G, et al. Cardiovascular health in African Americans: a scientific statement from the American Heart Association. *Circulation*. 2017;136:e393-e423.
- Green AR, Chun MBJ, Cervantes MC, et al. Measuring medical students' preparedness and skills to provide cross-cultural care. Health Equity. 2017;1:15-22.
- Dogra N, Giordano J, France N. Cultural diversity teaching and issues of uncertainty: the findings of a qualitative study. BMC Med Educ. 2007;7:8.
- Chapman EN, Kaatz A, Carnes M. Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. J Gen Intern Med. 2013;28:1504-1510.
- Tervalon M, Murray-García J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. JHCPU. 1998;9:117-125.
- Dogra N, Bhatti F, Ertubey C, et al. Teaching diversity of medical undergraduates: curriculum development, delivery and assessment. AMEE GUIDE no. 103. Med Teach. 2016;38:323-337.
- Steele C. A threat in the air: how stereotypes shape intellectual identity and performance. Am Psychol. 1997;52:613-629.
- Blair IV, Havranek EP, Price DW, et al. Clinicians' implicit ethnic/racial bias and perceptions of care among Black and Latino patients. Am J Public Health. 2013;103:92-98.
- 13. Nunez A. Transforming cultural competence into cross-cultural efficacy in women's health education. *Acad Med.* 2000;75:1071-1080.
- Chun M. Pitfalls to avoid when introducing a cultural competency training initiative. Med Educ. 2010;44:613-620.
- Orom H, Semalulu T, Underwood W 3rd. The social and learning environments experienced by underrepresented minority medical students: a narrative review. *Acad Med.* 2013:88:1765-1777.

- Hardeman RR, Przedworski JM, Burke S, et al. Association between perceived medical school diversity climate and change in depressive symptoms among medical students: a report from the medical student CHANGE study. J Natl Med Assoc. 2016:108:225-235.
- Shapiro J, Lie D, Gutierrez D, Zhuang G. "That never would have occurred to me": a qualitative study of medical students' views of a cultural competence curriculum. BMC Med Educ. 2006;6:1-7.
- Beach MC, Price EG, Gary TL, et al. Cultural competence: a systematic review of health care provider educational interventions. *Med Care*. 2005;43:356-373.
- Horvat L, Horey D, Romios P, Kis-Rigo J. Cultural competence education for health professionals. Cochrane Database Syst Rev. 2014;5:CD009405.
- Burgess D, van Ryn M, Dovidio J, Saha S. Reducing racial bias among health care providers: lessons from social-cognitive psychology. J Gen Intern Med. 2011;26:185-191.
- Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonella JS. Physicians' empathy and clinical outcomes for diabetic patients. *Acad Med*. 2011;86:359-364.
- 22. Chou CL, Cooley L. Communication Rx: Transforming Healthcare through Relationship-Centered Communication. McGraw-Hill Education; 2018:7-8.
- Ruben MA, Meterko M, Bokhour BG. Do patient perceptions of provider communication relate to experiences of physical pain? *Patient Educ Couns*. 2018;101:209-213.
- Cooper L. A randomized trial to improve patient-centered care and hypertension control in underserved primary care patients. J Gen Intern Med. 2011;26:1297-1304.
- Wheeler DJ, Zapata J, Davis D, Chou C. Twelve tips for responding to microaggressions and overt discrimination: when the patient offends the learner. *Med Teach*. 2018;41:1112-1117.
- Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*. 2009;302:1284-1293.
- Burgess DJ, Beach MC, Saha S. Mindfulness practice: a promising approach to reducing the effects of clinician implicit bias on patients. *Patient Educ Couns*. 2017;100:372-376.
- van Buuren A, Yaseen W, Veinot P, Mylopoulos M, Law M. Later is too late: exploring student experiences of diversity and inclusion in medical school orientation. *Med Teach.* Published online February 2, 2021. doi:10.1080/01421 59X.2021.1874326
- 29. Leonardo Z, Porter RK. Pedagogy of fear: toward a Fanonian theory of 'safety' in race Dialogue. *Race Ethn Educ*. 2010;13:139-157.
- Johnson AG. Privilege, Power, and Difference. Mayfield Publishing Company; 2001-12-28