COVID-19 and UNM Main Campus Faculty

Part I: Impact

INTRODUCTION

ADVANCE at UNM invited full-time faculty on UNM's Main Campus to complete an online climate survey in Fall 2020 (late October through mid-December) that included a subset of questions related to COVID-19 impacts. Of 1,066 eligible faculty, 428 (40%) completed the survey. Demographic and descriptive information for the sample can be found in Appendix A.

This report is a preliminary analysis of faculty responses to survey items related to COVID-19 (all Likert scales). Questions addressed faculty time allocation, negative impacts of COVID-19, and implications of remote work. Variations by gender, faculty rank, race/ethnicity, STEM, and first-generation status are noted in the Appendices. Group differences mentioned in this report are statistically significant at $p <$ .05 based on ANOVAs or t-tests. Respondents also had the opportunity to describe the ways in which the COVID-19 pandemic affected them. Quotations from faculty illustrate the quantitative survey results. Survey analyses are on-going.

The pandemic is exacerbating existing health inequities and is occurring in the context of profound racial, economic, and political stresses. As one faculty member commented, "An economic and environmental collapse, social unrest, a pandemic and a national political nightmare, coupled with the death of loved ones and the extra time to do a similar job is indeed difficult." This report focuses on the overall impacts of COVID-19 and includes some general, preliminary recommendations. Part II will include more detailed analysis by specific faculty groups, including intersectional analysis, and more extensive recommendations and options for implementation. Note that recommendations herein are consistent with the [current agreements between the academic administration and UA-UNM](#).
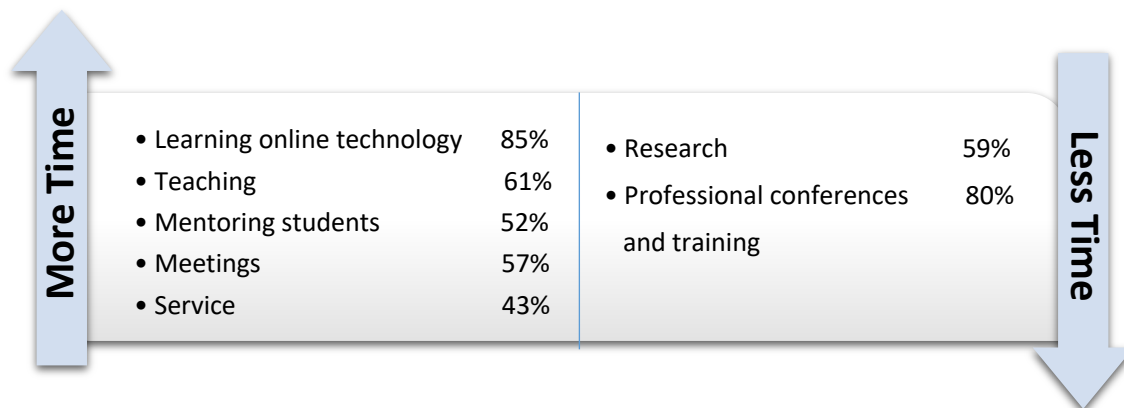
Faculty who wish to share experiences and suggestions for recommendations can email advance@unm.edu or provide them anonymously through [drop-us-a-line](#).

EXECUTIVE SUMMARY

Remote Work: Faculty performed the majority of their work remotely (88% on average) during Fall 2020. However, some differences existed between sub-groups (see Appendix B), with research faculty working remotely less frequently (76%) than faculty with other titles. Men and STEM faculty also performed less of their work remotely, compared to women and non-STEM faculty, respectively.

Time Allocation: The COVID-19 pandemic required 79% of faculty to devote more time to childcare and 64% of faculty spent more time caring for adults.

Professionally, faculty reported significant changes in their allocation of work time:

More Time		**Less Time**
• Learning online technology	85%	• Research	59%
• Teaching	61%	• Professional conferences and training	80%
• Mentoring students	52%		
• Meetings	57%		
• Service	43%		

These time allocation shifts were fairly similar across sub-groups, although several differences, particularly with regard to opportunities for professional training, are displayed in Appendix C.

Health and Well-being Impact: The pandemic is taking a notable toll on the average faculty member's physical and psychological well-being. Faculty reported the most negative effects on their stress levels, psychological well-being, and emotional well-being. Additional details are in Appendix D.

Professional Impact: Faculty reported noteworthy negative effects of the pandemic on their ability to concentrate on work and on their satisfaction with work. Of note, commitment to research was more negatively affected than commitment to teaching, with 38% of faculty reporting that their teaching commitment did not change at all. Responses to these survey items contained more variation by race/ethnicity, rank, and discipline than items pertaining to time allocation (see Appendix E).

The pandemic has had a negative impact on most faculty. As the data and quotations highlight, faculty at all ranks are affected. Yet the experiences and issues are profoundly different between individuals. Assistant professors worry they will be unable to establish research programs. Department chairs struggle to assist faculty and staff while feeling the weight of things left undone. Everyone worries about students. Parents stress over remote school and the overall well-being of their kids. Faculty living alone are isolated. Acknowledging our collective losses, while honoring individual achievements under dramatically different situations will be a significant challenge.

Recommendations:

- Considering the magnitude of the burden that our faculty (and staff) shoulder, it is critical to approach one another with compassion, civility, and flexibility.
- Acknowledge and share faculty efforts in support of students.
- Change annual and milestone review expectations to acknowledge that the impacts of the pandemic are simultaneously broad and highly individual. Faculty should document both the COVID-19 impact and their pandemic efforts in annual and milestone reviews.
- Recognize that the pandemic impact will be long-lasting:
  - Expect internal review committees and external reviewers to include the pandemic impact in their evaluations for at least the next 5-6 years.
  - Acknowledge that faculty, staff, and students will require time to adapt and recover from COVID stressors once in-person operations resume.

- Maintain flexibility for remote meeting attendance and working from home.
- Support new assistant professors in becoming part of the community; provide them with additional resources, including graduate student support, as appropriate, for research, scholarship, and creative works.
- Develop additional assistance for associate professors in making progress towards promotion.
- Support Department Chairs and Deans during the return to in-person operations, particularly those with challenging climate issues.

DETAILED RESULTS

Caregiving and Work-Life Balance

Faculty spent substantially more time during Fall 2020 providing care or supervision for children, with 79% of faculty indicating additional time in this area. Both women and men reported more time investment in childcare, including overseeing online schoolwork, compared to prior semesters. More assistant professors (86.5%), lecturers (82%), and associate professors (83%) reported an increase in time spent on childcare than professors (68%). There were no other differences in childcare demands between sub-groups of faculty.

> "Being a mother to young children has significantly impacted my work. Being a woman and parent has negatively impacted how I experience the effects of COVID-19 in my productivity, writing/research, teaching, and service commitments. This is because I am the primary caretaker, as well as the person who runs the household as my spouse [is an essential] worker. There should be an alternative evaluation in the tenure and promotion process that is directly focused on female faculty of young children and are the primary caretakers."

COVID-19 also demanded more time from faculty in terms of caring for adults (e.g., parents, adult children), with women and men reporting similar demands (64% overall reporting increased adult care). There were no differences in adult caregiving demands by faculty sub-groups.

Many faculty reported having to work non-traditional hours to accommodate caring responsibilities and noted increased burnout. Related, faculty reported greater interruptions while working at home. Tasks requiring deeper reflection and thought were more difficult (if not impossible) to accomplish in the short time intervals faculty had. Comments frequently referenced problems with work-life balance and drawing boundaries between home and work:

> "I work 12-14 hours a day and on weekends. My faculty are exhausted and I am too. It appears that we are not working from home, but living at work. We are giving it our best effort because of the extraordinary circumstances, but this is not sustainable. I believe in work/life balance and it just doesn't seem to exist right now."

> "The lack of a boundary between "at work" and "at home" (and others' lack of boundaries) is tiring. This has led to working and worrying more but accomplishing less."

Faculty Health and Well-being

COVID has had a substantial impact on faculty well-being. There were significant differences between faculty groups, which will be analyzed in more detail in Part II of the report (e.g., intersectionality), but it needs to be emphasized that *most* faculty experienced negative well-being effects (see Appendix D).

The greatest toll occurred in terms of stress level. Faculty reported large increases in stress, with 73% of women reporting a significant increase, compared to 62% of men. URM faculty reported somewhat more stress than non-URM faculty, and non-STEM faculty reported slightly higher stress than STEM faculty.

Women faculty reported significantly greater effects of COVID on their psychological well-being (e.g., restlessness, worrying) than men. Sixty-four percent of women faculty report a large impact, compared to 50% of men. In general, assistant and associate professors reported more negative psychological effects than full professors, as did URM (vs. non-URM) faculty and non-STEM (vs. STEM) faculty. Many faculty reported feeling isolated, a concern that was particularly common for those who lived alone.

Faculty reported moderately more intense negative emotions (e.g., fear, anger, irritability), a rise that was greater for women than men (54% vs. 44%). URM faculty reported a greater impact on their emotions than non-URM faculty. The increase in negative emotions for assistant and associate professors, compared to full professors, also approached significance.

> "I feel stressed, irritable, and tired so much more than I ever have. Life is so monochromatic -- professionally and personally."

COVID-19 moderately affected faculty members' energy levels; another change that was worse for women, URM faculty, assistant professors, and non-STEM faculty.

> "We started the Fall semester exhausted and right now we are barely keeping our heads above water, but we keep chugging along."

> "Given my situation (no kids at home, no financial concerns, light teaching semester) I am surprised at how much my energy and focus have been affected by the pandemic."

COVID-19 moderately affected faculty members' physical health – an effect that was similar for women and men. URM faculty reported a greater impact on their physical health than non-URM faculty. Non-STEM faculty also experienced a greater toll on their physical health, as did assistant and associate professors.

Summary of Caregiving and Well-being:

The pandemic has broadly affected faculty in ways that are also highly individual. As will be shown throughout this report, many domains show a wide range of responses.

Most faculty reported increased time on childcare and adult caregiving. This caused unsustainable schedules, an increase in stress, a decrease in psychological well-being, and physical health impacts.

Faculty who do not have increased caregiving responsibilities also report increased stress and other negative impacts. Faculty who live alone and faculty new to UNM feel particularly isolated.

Recommendations Related to Caregiving and Well-being:

- View the fall semester as a transition time, if a return to face-to-face learning is possible.
    - Faculty will need recovery time once in-person school and childcare are available.
    - Leaders at all levels (who also need recovery time) will need to moderate plans based on faculty ability to engage.
    - The return to whatever the new "normal" is will not occur quickly and will vary significantly among faculty.
- Expect that parents will need to help their kids adjust as conditions change. Support this ongoing time demand during the transition back to in-person operations.
- At the department and college/school level, pay particular attention to new faculty when in-person operations can continue. They will still be "new" to many aspects of departmental and UNM life.
- Incorporate the highly individual and broad impacts of COVID-19 into promotion and tenure evaluations. All aspects of faculty life have been affected.

Teaching and Working with Students

Faculty are strongly committed to teaching and supporting students in the face of COVID-19. Approximately 60% of faculty stated that COVID had a low impact on their commitment to teaching, with only slightly over 20% stating that it had a large impact on their commitment. In terms of faculty rank, assistant professors reported the greatest negative impact on their teaching commitment.

The greatest rise in time commitment across faculty was learning work-related technology, including Zoom and other online platform resources. Eighty-five percent of faculty reported spending more time learning online technologies, with no significant differences by gender or other sub-groups. The switch to online and hybrid teaching resulted in 61% of faculty reporting increased time dedicated to teaching (no differences by gender or other sub-groups). More STEM faculty (76%) reported an increase in time allocated to teaching than faculty from other disciplinary areas (56%).

> "I struggle to find the words to express how much more time-consuming teaching is now."

COVID-19 and remote operations have affected faculty's relationships with students, with 47% of men reporting a significant impact, compared to 34% of women. Many faculty members reported concerns being able to adequately support their students in an online teaching format. Fifty-two percent of faculty committed more time to mentoring students. Women faculty spent significantly more time mentoring students (58%) than did men faculty (43%). Student relationships and mentoring did not differ between other sub-groups of faculty.

> "While this pandemic has drastically changed the climate of teaching and research, I find that more energy has gone into developing connections with students and developing teaching strategies to ensure their success in the program. This has taken a significant amount of energy from what I was hoping would be time for scholarship."

> "I am spending MUCH more energy on my students than before. There has been so much focus on how students are struggling that I've very much changed the way I interact with them."

> "Not getting to see and interact with my students face-to-face was a challenge, also the number of issues that they face currently are so many and I felt helpless about the support and training that I could offer them at this time. I am afraid that many students will not pass this class, even though I made every concession that I can think of. I am not used to working with students that

do not reach out for help and there were too many of them for me to identify and contact. The academic responsibilities that I have means that I cannot give them the adequate support."

"I feel that there should be extra "points" given to faculty who do an excellent job at teaching and mentoring and service under covid--some of us are rockin' it, and the administration's response has been to say "you don't have to count your teaching evaluations this year." What about, instead, saying, those of you who rock it in your teaching evaluations will get a bonus or extra tenure "points"? How about some positive reinforcement?"

Summary of Teaching and Work with Students:

Faculty have significantly increased time spent on teaching, technology required for remote teaching, and mentoring students. Helping students cope with the pandemic has brought additional stress for faculty.

Recommendations Regarding Teaching and Work with Students:

- Share this dramatic shift in faculty time and energy devoted to student support with students and the broader community. Recognition and appreciation are important.
- Increase the weight given to successful educational efforts, including increased student mentoring, in annual and milestone reviews.
- Faculty should document the many ways in which they modified their approaches to teaching and supported students and be reminded that they can choose to include student evaluations of their teaching in annual and milestone reviews.
- Support faculty who are struggling with student engagement and mentoring, both during remote operations and as in-person operations return.

Scholarly Work and Professional Development

Research, scholarship, and creative work have taken a back seat to teaching, student mentoring, and caregiving (broadly defined). Not only has the amount of time available for scholarly work declined, but when faculty do find time for scholarship, many struggle to concentrate and drum up motivation. Likely as a consequence, faculty reported declined commitment to scholarly work, as well as lower productivity, on average. These issues are discussed in turn:

COVID demands significantly reduced the amount of time faculty could devote to their research, scholarship, or creative work. Fifty-nine percent of faculty reported a decrease in time for scholarly work, and this did not statistically differ between faculty sub-groups.

COVID changes markedly affected faculty in terms of their opportunities for participation in conferences and training to advance their professional development, with 80% of faculty reporting less time in this domain. This change similarly affected women and men but differentially affected faculty based on race/ethnicity, faculty rank, and STEM status (see Appendix C).

The quality of the time faculty spent on research also decreased. Over 53% of faculty disagreed with the statement, "I have had the opportunity to think more deeply about my research or scholarship," which is consistent with reports of less time for scholarly work. Sixty-five percent of women reported fewer opportunities to contemplate their scholarly work, compared to 44% of men. URM faculty endorsed this item more strongly than non-URM faculty. Responses to this item did not vary by faculty rank or disciplinarity.

> "I feel less motivated to engage deeply in my research as it seems like the pandemic and social justice issues are more important but my colleagues don't seem to feel the same."

Faculty also reported less opportunity to develop new lines of scholarship, although this varied by gender/sex, with men reporting more opportunities to explore new scholarship during this time, compared to women. No other sub-group differences between faculty emerged.

The new demands and distractions brought by COVID meant that the average faculty member struggled with work, even when they did find time. This change applied to all areas of work but especially scholarly productivity. In particular, faculty reported greater difficulty concentrating on their work, as well as lower work-related motivation and less satisfaction with work. Interestingly, women faculty reported greater difficulty concentrating than did men, but gender differences did not emerge with regard to work-related motivation or work satisfaction. URM faculty reported more negative effects for all three variables, compared to non-URM faculty. Assistant professors reported more issues with concentration and motivation, as did non-STEM faculty. Related to the section on faculty health and well-being, some faculty commented on psychological well-being serving as a barrier to research:

> "Research and writing have been super hard. I just feel overwhelmed and tired all the time."

COVID stressors affected commitment to research, scholarship, or creative work for many faculty. URM faculty and faculty in non-STEM disciplines reported a larger toll in this domain, compared to non-URM and STEM faculty, respectively (no differences by gender or faculty rank).

Ultimately, many faculty reported a moderate-to-high toll of COVID on their productivity. URM faculty and assistant professors reported a larger negative impact on productivity than other groups of faculty.

> "I feel like I am working twice as hard to get half as much done…"

> "Research conferences, committee meetings, funding proposal deadlines are still going on as if nothing has changed. I miss out on most of these. I cannot take on new students. I can't apply for funding. I can't work on my research."

> "The pandemic has significantly affected faculty who do experimental research on campus, especially for junior faculty who have joined in UNM over the past two years. In terms of research, the university has NOT paid particular attention/support to these faculty."

Less time for research, fewer opportunities to establish new scholarship, greater burnout, and pre-COVID expectations in some departments mean that faculty are deeply concerned about the financial, reputational, and long-term impacts of the pandemic. Many faculty worry about implications for their performance reviews and job security.

> "The negative impacts of this pandemic will be felt by me both personally and professionally for the rest of my life..."

> "All in all, I am very worried that I will not recover from this lack of productivity in my first two years. Extending the tenure clock will only help if I can find more money during that time."

> "…as a new professor still building my group. My lack of productivity compared to more established colleagues or theorists seems inevitable, but it will still be incredibly harmful, as my startup funds are running out without getting my first results. My graduate students will likely also experience delayed graduation times."

"The university's approach to tenure- allowing an extra year- is a nice option BUT it also implies that I am not working rather than acknowledging that I am doing different work. There is also an issue with putting off promotion financially that the University needs to consider."

Related, faculty on <u>sabbatical</u> are frustrated by the inability to carry out their plans and have not had a chance to recharge.

"I began my sabbatical in January. I feel devastated by the loss of what should have been a period of growth and renewal. I ran hard, taught an enormous overload and carried a service burden prior to my sabbatical. I don't even care that my sabbatical is ending. I wish I could have just ended it sooner and taken the rest of it when the pandemic ends. I feel exhausted an hollow. I do not look forward to being a professor now. I plan to engage more superficially. I plan to decline service work or half ass it. I just don't have the bandwidth to re-engage. I need to protect myself. I am so burnt out "

"I am on sabbatical and it has complicated (upended) my research and travel plans"

Summary of Scholarly Work and Professional Development:

Faculty have sacrificed their scholarship to focus on teaching, students, and caregiving. Many types of work – lab, field, archival, human subjects, studio – have been brought to a standstill. New faculty have been delayed in establishing their research, recruiting and training graduate students, and developing collaborations. Women faculty have had fewer opportunities than men to make progress on the longer-term aspects of their scholarship, notably being able to think more deeply about and develop new lines of scholarship.

Recommendations Regarding Scholarly Work and Professional Development:

- Flexibility and consideration of individual circumstances will be required for untenured faculty. Extending time-to-tenure beyond the additional year will exacerbate the stress and financial uncertainty of current assistant professors.
    - Some faculty, however, may have circumstances requiring the option of additional time.
- The tenure and promotion expectations for research, scholarship, and creative works will need to take into account "achievement based on opportunity."
    - Faculty in similar disciplinary areas have suffered widely different impacts, which will need to be part of milestone review evaluations.
    - Faculty in different disciplinary areas have faced unique challenges, on average, which must also be considered during evaluations.
- Where appropriate, provide additional start-up support for faculty hired during the last two years, particularly in terms of graduate student support, use of fee-based facilities, and on-campus collaborations.

<u>Administrative and Service Work</u>

Most faculty reported an increase in <u>time spent in meetings</u> (57%), with little variation between groups. While 55% of faculty disagreed with the statement "I find online meetings preferable to in-person meetings," nearly one-third preferred online meetings, with slightly more lecturers and assistant professors supporting them, consistent with caretaking and scheduling issues.

Forty-three percent of faculty reported spending more time on service work, with little variation between groups. Feedback indicated that developing and implementing COVID-19 procedures created a high service burden for many faculty, causing research and long-term tasks to be postponed. Several faculty commented on workload shifts not being acknowledged or recognized.

> "The service obligations have been the biggest impact of COVID-19. The need to create policies & procedures for our students and navigate accreditation guidelines with pandemic restrictions while keeping our students progressing through the program has been incredibly time consuming. Unfortunately I don't think this is being captured very well in annual reports, surveys, etc. I've been asked a lot about teaching (yes, it was time consuming to shift virtually) and research (yes, I'm distracted from this), but the burden of navigating the pandemic, especially for an accredited program that requires in-person learning, is relentless. I hope this area is not being overlooked."

> "As [an administrator], there seems to be more work in subtle ways… everything takes more time, staff members working at low capacity, trying to reduce burdens on faculty by shouldering more service work, more contact with students struggling in classes. Accommodating faculty members who have complicated family situations shifts work to others. I support this of course but I also feel like many workload shifts are unrecognized."

> "As [an administrator], I have fallen behind in my typical responsibilities and found that the constant stream of additional demands is preventing me from catching up very quickly. I am very stressed about the efforts by the university to solve budgetary problems by watching several long-time staff retire without apparent regard to the impact on departments. My department is excellent, because of decades of effort by legions of colleagues. The pandemic has the potential to be a perfect storm that diminishes this accomplishment."

Summary of Administrative and Service Work:

Faculty have too many meetings! Zoom has made it easy for new recurring meetings to be created, some of which could be replaced by emails and phone calls. Increased time in meetings can reduce quality time available for scholarly work and teaching.

Department chairs and program directors are finding administrative loads during the pandemic to be oppressive, and budget cuts enhance concerns about maintaining high quality programs.

Recommendations Regarding Administrative and Service Work:

- Acknowledge, in a meaningful way, the work of faculty who take on extra service, either to assist other faculty or as part of the pandemic response.
    o Work that has contributed to student success should be included as part of "teaching" statements in annual and milestone reviews.
- Evaluate meetings, committees, and service work at all levels of the institution. Shorten meetings, decrease meeting frequency, and identify objectives and priorities for committees in order to ensure that time committed is commensurate with the time necessary to achieve objectives.
    o Departments and programs should use this opportunity to increase transparency in service loads.

<u>Other Implications of Remote Work</u>

On average, faculty found <u>less commuting</u> beneficial (66%), with women (70%) benefitting more than men (59%). Less commuting likely freed up precious time and lowered stress related to traffic, parking, and hurrying to campus locations at specific times. However, some faculty noted that they missed the work/home boundaries, transition time, or exercise provided by their commutes.

There was substantial variation in response to whether <u>weekday preparation stress</u> decreased: 48% of women and 39% of men reported that weekdays had become less stressful, while 37% of women and 38% of men disagreed with this statement. Some faculty reported that the ability to work in the comfort of their own home and with their own schedule was beneficial, while others noted that coordination and scheduling between faculty working remotely and those working on campus was an issue as well.

Recommendations Regarding Implications of Remote Work:

- Provide the option of remote attendance at meetings, particularly large meetings, in order to provide schedule flexibility. Doing so can improve work-life balance.
- View the fall as a transition period, expecting that some faculty will need more time than others to adjust to in-person operations. It is likely that some faculty will, initially, chose to work from home more regularly. Faculty should be given support and flexibility in figuring out how to engage more fully with students and colleagues.

<u>Relationships with Colleagues</u>

Remote operations and COVID stressors affected faculty's reported <u>relationships with colleagues</u>. URM faculty and assistant professors reported a greater negative impact on these relationships, compared to non-URM faculty and those of other ranks, respectively.

> "I have experienced a large decrease in my feeling of connection with my students and colleagues."

In particular, new faculty reported feeling disconnected from their departments, noting a lack of integration with their units and few networking opportunities.

> "It has impacted my work and social life in not allowing networking with colleagues. This includes socializing but also opportunities to develop new research collaborations as well as community partners. One of the reasons I was excited to come to New Mexico was all of the very interesting human environment dynamics of the region but have been unable to pursue any of these. All of my research still relies on contacts prior to UNM."

> "I am a new faculty member. I feel like I'm free-falling some of the time and have concerns that when this is over, everyone will treat me like a faculty member who has "already been around" rather than like a brand new colleague (which is how I expect I'll continue to feel because I have been completely detached from the campus community that is supposed to be my new foundation and home)."

Faculty benefitted from remote work in terms of somewhat <u>less exposure to problematic people</u> at work though, with 56% of respondents agreeing this was a benefit. There were no significant differences among faculty sub-groups. Some faculty expressed that the lack of in-person interactions created or deepened divides within their departments.

Recommendations Regarding Relationships with Colleagues:

- Assist new faculty with on-campus and community connections once in-person operations resume, as well as in any ways feasible during remote operations (e.g., online social hours).
- Support department chairs in managing the return to in-person operations and addressing department climate and civility issues.

Overall, the results demonstrate that faculty devoted substantially more time to both personal and professional domains, compared to prior semesters. Faculty rallied in laudable ways to help their families, students, and colleagues. Yet, this shift meant less time for research, scholarly or creative work, as well as for professional development via trainings and conferences – noteworthy concerns, given UNM's standing as a R1 institution.

As an earlier ADVANCE at UNM report on COVID-19 noted, the pandemic has exacerbated existing inequities while creating new ones. Constructively addressing the impacts of COVID-19 on faculty life, particularly by acknowledging differential effects, can also help address pre-existing issues. If we act boldly, we will positively influence the experiences of faculty, students, and staff. Critically, we will support and retain an extremely talented group of early career faculty.

Recommendations:

- Considering the magnitude of the burden shouldered by our faculty (and staff), it is critical to approach one another with compassion, civility, and flexibility.
- Acknowledge and share faculty efforts in support of students.
- Change annual and milestone review expectations to acknowledge that the impacts of the pandemic are simultaneously broad and highly individual. Faculty should document both the COVID-19 impact and their pandemic efforts in annual and milestone reviews.
- Recognize that the pandemic impact will be long-lasting:
  - Expect internal review committees and external reviewers to include the pandemic impact in their evaluations for at least the next 5-6 years.
  - Acknowledge that faculty, staff, and students will require time to adapt and recover from COVID stressors once in-person operations resume.
- Maintain flexibility for remote meeting attendance and working from home.
- Support new assistant professors in becoming part of the community. Provide additional resources, including graduate student support, as appropriate, for research, scholarship, and creative works.
- Develop additional assistance for associate professors in making progress towards promotion.
- Support Department Chairs and Deans during the return to in-person operations, particularly those with challenging climate issues.

Acknowledgements

Appendix A: Demographic Data for Survey Respondents

|		Number	% of sample
GENDER/SEX[1]	Female	245	57.2
	Male	179	41.8
	Non-binary, genderqueer, or transgender	4	0.9
RACE/ETHNICITY[2]	Underrepresented minority (URM)	109	25.5
	Non-URM	313	73.1
TITLE	Assistant Professors	87	20.3
	Associate Professors	124	29.0
	Full/Distinguished Professors	135	31.5
	Lecturers	54	12.6
	Research Faculty	17	4.0
STEM – NOT INCLUDING SOCIAL SCIENCE[3]	STEM (Engineering, Natural Sciences)	118	27.6
	Non-STEM	310	72.4
STEM – INCLUDING SOCIAL SCIENCE[3]	STEM (Engineering, Natural Sciences, Social Sciences)	213	49.8
	Non-STEM	215	50.2
FIRST GENERATION STATUS	Yes	256	59.8
	No	157	36.7

Notes. When percentages do not equal 100%, differences are due to missing data.

[1]Response rates were high enough to include "women/female" and "men/male" in analyses for gender/sex (terminology used to acknowledge intertwined biological and sociocultural factors; Hyde, Bigler, Joel, Tate, & van Anders, 2019).

[2]Underrepresented racial and ethnic groups are defined using criteria from the National Science Foundation: https://www.nsf.gov/statistics/2017/nsf17310/digest/introduction/#:~:text=The%20representation%20of%20cert ain%20groups,Natives%E2%80%94are%20underrepresented%20in%20S%26E.

[3]Criteria by the National Science Foundation were used to define STEM (e.g., https://fas.org/sgp/crs/misc/R42642.pdf)

Appendix B: Percentage of Time Faculty Spent Working Remotely
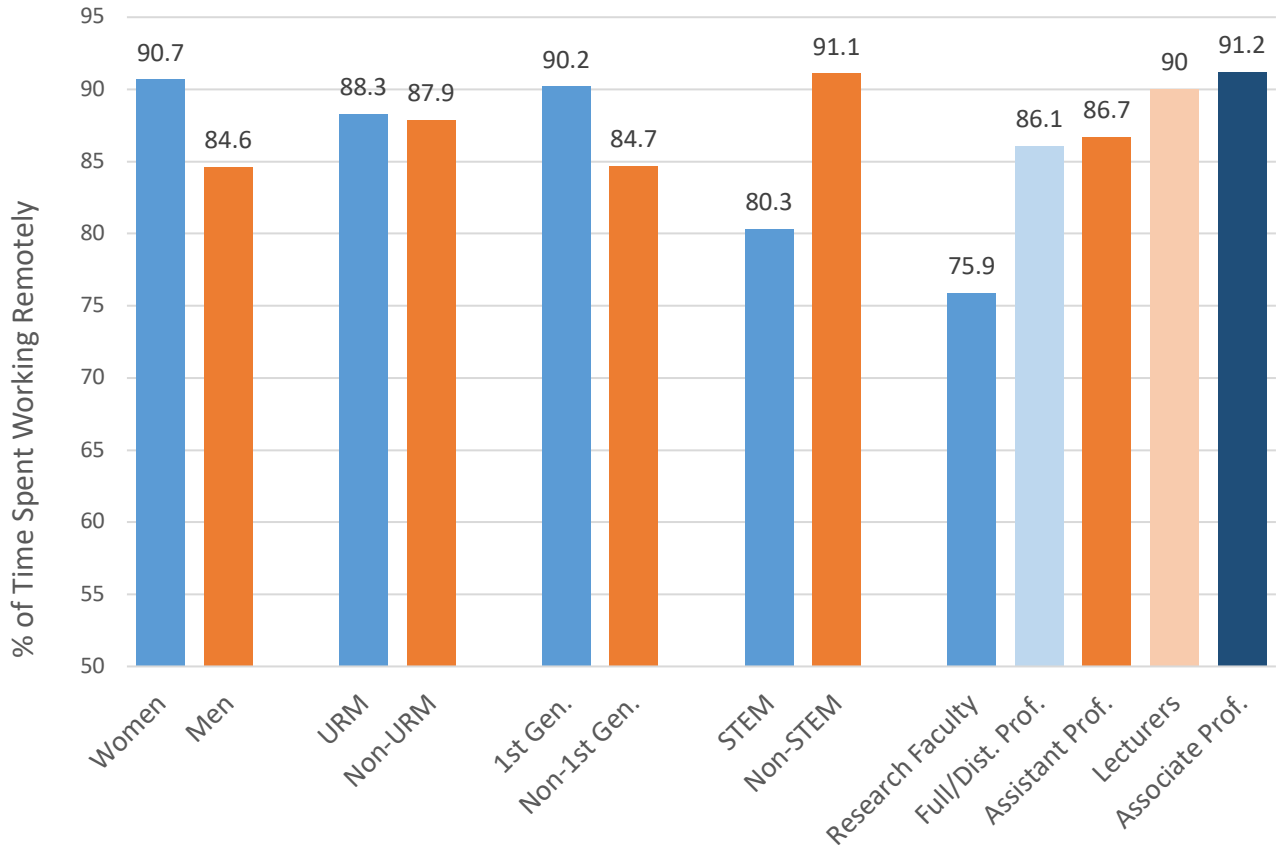
Notes. URM = Underrepresented minority. 1st Gen. = First generation.

Sub-groups that statistically differ from one another (*p* < .05):

- Women and Men
- First generation and Non-first generation
- STEM and Non-STEM
- Research faculty, compared to associate professors

Appendix C: Time Allocation during COVID-19 Pandemic Overall and by Sub-groups

Instructions: Compared to semesters prior to the COVID pandemic, how much time do you spend in the following domains this semester?

(1 = much less; 2 = somewhat less, 3 = about the same, 4 = somewhat more; 5 = much more)

Means/averages, as well as percentages of faculty who indicated more, same, or less values, are provided.

For sub-groups, statistics are provided when groups statistically differ ($p < .05$) based on ANOVAs and t-tests.

Sample Mean (Descending)			Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Learning online technology	4.41		-	-	-	-	-	-
	More: 85.1%	Same: 13.9%	Less: 1%					
Childcare	4.34		-	-	-	Lect: 4.55 (81.8% more) Ass't: 4.51 (86.5%) Assoc: 4.43 (82.9%) Full: 4.02 (67.9%)	-	-
	More: 79.1%	Same: 17.8%	Less: 3.1%					
Adult care	3.87		-	-	-	-	-	-
	More: 64.2%	Same: 29.8%	Less: 6%					
Teaching	3.83		-	-	-	-	STEM: 4.10 (76.2% more) Non-STEM: 3.74 (55.8% more)	-
	More: 61.2%	Same: 29.6%	Less: 9.2%					
Meetings	3.68		-	-	1st Gen: 3.59 (53.8% more) Non-1st Gen: 3.81 (62.2% more)	-	-	-
	More: 57.3%	Same: 26%	Less: 16.7%					
Mentoring	3.49		Women: 3.60 (58.2% more) Men: 3.33 (43.4% more)	-	-	-	-	-
	More: 51.9%	Same: 28.6%	Less: 19.5%					

Category					URM	1st Gen	Rank		STEM
Service	3.39			-	-	-	-	-	-
	More: 42.6%	Same: 36.5%	Less: 21%						
Research	2.39			-	-	-	-	-	-
	More: 17.9%	Same: 22.8%	Less: 59.3%						
Prof. training	1.79			-	URM: 2.07 (72.4% less) Non-URM: 1.68 (82.4% less)	1st Gen: 1.66 (84.2% less) Non-1st Gen: 2.02 (71.9% less)	Lect: 2.18 (61.3% less) Ass't: 1.94 (75.9% less) Assoc: 1.67 (87% less) Full: 1.61 (83.7% less)	-	STEM: 1.64 (84.2% less) Non-STEM: 1.93 (75.5% less)
	More: 10.3%	Same: 10%	Less: 79.8%						

Notes. URM = Underrepresented minority. 1st Gen. = First generation. Lect = Lecturers, Ass't = Assistant professors, Assoc = Associate professors, Full = Full and distinguished professors. Research faculty were not included in these analyses due to low sample size. STEM with SocSci = Social sciences were included in STEM designation.

Appendix D: Impact of COVID-19 Pandemic on Faculty Health and Well-being

Instructions: To what extent has the COVID-19 pandemic <u>negatively</u> affected your…

(1 = not at all; 2 = slightly, 3 = moderately, 4 = quite a bit; 5 = significantly)

Means/averages are provided. For sub-groups, statistics are provided when groups statistically differ based on ANOVAs and t-tests. Differences approaching significance (p = .05 to .10) are provided in parentheses.

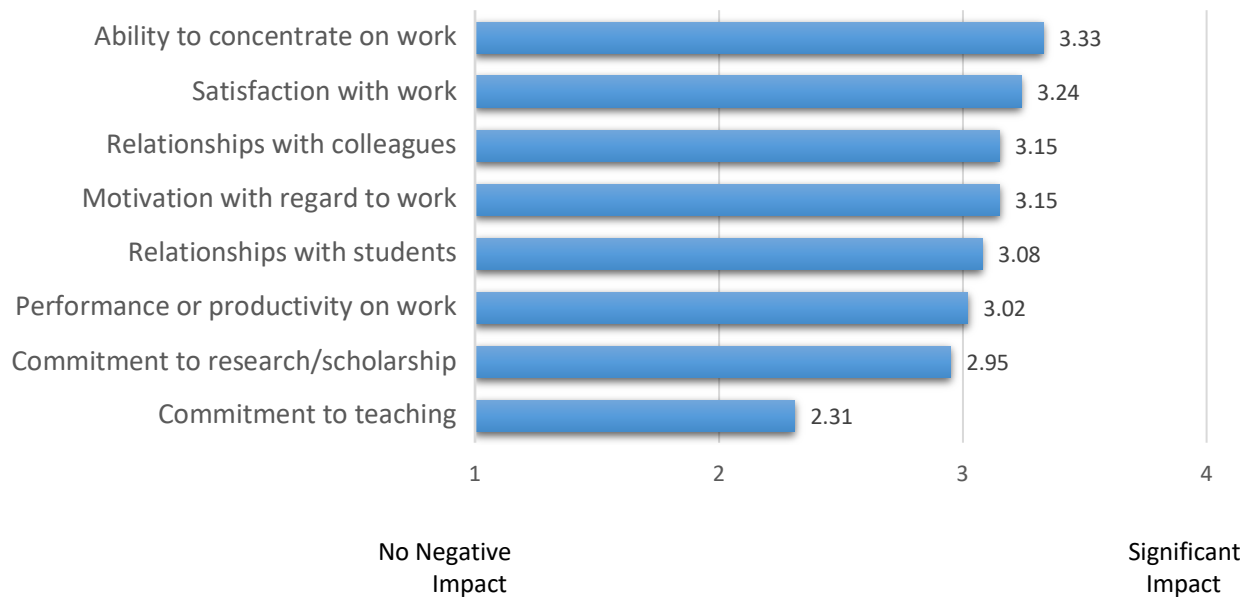|	Sample Mean	Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Stress Level	3.93	Women: 4.05 Men: 3.75	URM: 4.11 Non-URM: 3.87 (p = .052)	-	-	STEM: 3.78 Non-STEM: 3.99 (p = .071)	STEM: 3.81 Non-STEM: 4.05
Psychological Well-being	3.70	Women: 3.83 Men: 3.51	URM: 3.92 Non-URM: 3.63	-	Ass't: 3.99 Assoc: 3.84 Full: 3.55 Lect: 3.53	STEM: 3.47 Non-STEM: 3.79	STEM: 3.56 Non-STEM: 3.85
Emotional Well-being	3.37	Women: 3.49 Men: 3.17	URM: 3.29 Non-URM: 3.58	-	Ass't: 3.60 Assoc: 3.54 Lect: 3.26 Full: 3.19 (p = .058)	STEM: 3.48 Non-STEM: 3.08	STEM: 3.20 Non-STEM: 3.54
Energy Level	3.31	Women: 3.43 Men: 3.12	URM: 3.64 Non-URM: 3.20	-	Ass't: 3.63 Assoc: 3.44 Lect: 3.19 Full: 3.13	STEM: 2.99 Non-STEM: 3.43	STEM: 3.13 Non-STEM: 3.48
Physical Health	2.80	-	URM: 3.92 Non-URM: 3.63	Non-1st gen slightly higher (p = .053)	Ass't: 3.06 Assoc: 2.98 Lect: 2.83 Full: 2.52	STEM: 2.58 Non-STEM: 2.89	STEM: 2.67 Non-STEM: 2.93

Notes. URM = Underrepresented minority. 1st Gen. = First generation. Lect = Lecturers, Ass't = Assistant professors, Assoc = Associate professors, Full = Full and distinguished professors. Research faculty were not included in these analyses due to low sample size. STEM with SocSci = Social sciences were included in STEM designation.

Appendix E: Impact of COVID-19 on Faculty Professional Well-being

Instructions: To what extent has the COVID-19 pandemic <u>negatively</u> affected your…

(1 = not at all; 2 = slightly, 3 = moderately, 4 = quite a bit; 5 = significantly)

Means/averages are provided. For sub-groups, statistics are provided when groups statistically differ based on ANOVAs and t-tests. Differences approaching significance (p = .05 to .10) are provided in parentheses.

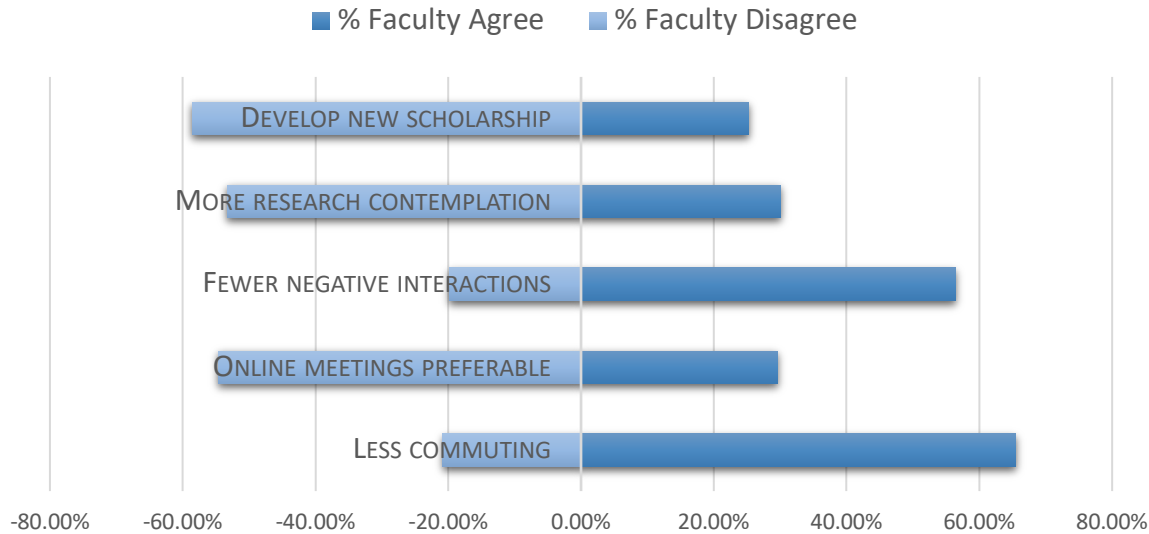|	Sample Mean	Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Ability to Concentrate on Work	3.33	Women: 3.48 Men: 3.09	URM: 3.65 Non-URM: 3.22	-	Ass't: 3.68 Assoc: 3.55 Full: 3.23 Lect: 2.89	STEM: 3.06 Non-STEM: 3.43	STEM: 3.18 Non-STEM: 3.48

	Sample Mean	Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Work Satisfaction	3.24	-	URM: 3.46 Non-URM: 3.16	-	-	-	-
Work Motivation	3.15	-	URM: 3.52 Non-URM: 3.03	-	Ass't: 3.50 Assoc: 3.28 Full: 3.03 Lect: 2.91	STEM: 2.89 Non-STEM: 3.25	STEM: 3.03 Non-STEM: 3.27 (p = .071)
Relationships with Colleagues	3.15	-	URM: 3.50 Non-URM: 3.02	-	Ass't: 3.46 Lect: 3.32 Assoc: 3.10 Full: 2.98 (p = .051)	-	-
Relationships with Students	3.08	Women: 2.91 Men: 3.32	-	-	-	-	-
Performance/ Productivity	3.02	-	URM: 3.28 Non-URM: 2.93	-	Ass't: 3.44 Assoc: 3.06 Full: 2.90 Lect: 2.77	-	-
Commitment to Scholarly Work	2.95	-	URM: 3.38 Non-URM: 2.81	-	-	STEM: 2.69 Non-STEM: 3.04	STEM: 2.72 Non-STEM: 3.17
Commitment to Teaching	2.31	-	URM: 2.54 Non-URM: 2.24 (p = .057)	-	Ass't: 2.66 Assoc: 2.40 Full: 2.13 Lect: 2.02	-	-

Notes. URM = Underrepresented minority. 1st Gen. = First generation. Lect = Lecturers, Ass't = Assistant professors, Assoc = Associate professors, Full = Full and distinguished professors. Research faculty were not included in these analyses due to low sample size. STEM with SocSci = Social sciences were included in STEM designation.

Appendix F: Implications of Remote Work on Faculty

Instructions: Please rate the extent to which you agree with each statement pertaining to the impact of COVID-19 this semester (Fall 2020)…

(1 = strongly disagree; 2 = somewhat disagree; 3 = neutral; 4 = somewhat agree; 5 = strongly agree)

For sub-groups, statistics are provided when groups statistically differ based on ANOVAs and t-tests. Differences approaching significance (p = .05 to .10) are provided in parentheses.

	Sample Mean			Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Less Commuting Preferable	3.69			Women: 3.79 Men: 3.54	-	-	-	-	-
	Agree: 65.5%	Neut: 13.7%	Disagree: 20.8%						

	Sample Mean			Gender	Race/ Ethnicity	1st Gen.	Rank	STEM	STEM with SocSci
Fewer Negative Coworker Interactions	3.52			-	-	-	-	-	-
	Agree: 56.4%	Neut: 23.8%	Disagree: 19.8%						
More Time to Consider Research	2.60			Women: 2.43 Men: 2.82	URM: 2.91 Non-URM: 2.51	1st gen: 2.52 Non-1st: 2.81	-	-	-
	Agree: 30%	Neut: 16.6%	Disagree: 53.3%						
Online Meetings Preferable	2.55			-	-	-	Lect: 2.85 Ass't: 2.71 Assoc: 2.60 Full: 2.32 (p = .051)	STEM: 2.37 Non-STEM: 2.62 (p = .085)	STEM: 2.40 Non-STEM: 2.70
	Agree: 29.6%	Neut: 15.9%	Disagree: 54.6%						
Time for New Scholarship	2.40			Women: 2.23 Men: 2.60	-	-	-	-	-
	Agree: 25.2%	Neut: 16.2%	Disagree: 58.6%						

Notes. URM = Underrepresented minority. 1st Gen. = First generation. Lect = Lecturers, Ass't = Assistant professors, Assoc = Associate professors, Full = Full and distinguished professors. Research faculty were not included in these analyses due to low sample size.