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Psychologists on Interdisciplinary Teams: Barriers to Interdisciplinary Work for Psychologists at the Pre-Doctoral Level and Beyond

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Abstract

With the shift of psychologists into practice in interdisciplinary medical settings, where might these providers receive adequate training for effective entry into these roles? The field of health psychology struggles to adequately keep up with the need for specialized psychologists within medical settings. Training programs have historically failed to provide training opportunities within interdisciplinary medical settings. This project examined the interviews of three psychologists with experience working and training pre-doctoral level students in interdisciplinary, health-focused, medical settings. Based on the information gathered herein, it appears that the barriers to training pre-doctoral psychology students within medical establishments stem from the following themes: ill-defined roles, limited ability to specialize, individual's capabilities, psychologists being undervalued, and financial constraints. This qualitative ethnographic examination looks at the barriers to developing additional training for pre-doctoral level psychology students within health-focused environments to meet the ever-growing need to integrate psychologists into interdisciplinary medical settings.

Keywords: Interdisciplinary teams, health psychology, primary care, doctoral training

Introduction

Throughout history, medical advancement in health care emerged as a key contributor to the progression of modern health care (Mittelman & Hanaway, 2012). The modernization of medical systems and the increased use of primary care for preventative medicine has improved the health outcomes of the population (Shi, 2012). Preventative medicine has a measurable effect of increased life expectancy through the management of chronic disease and the continued increase of healthier personal habits in patients, to manage risk factors to their health (Bunker, 2001). Interdisciplinary medical settings have also been an effective setting for psychologists to treat a myriad of mental health diagnoses, including diagnoses that were previously believed to only be effectively treated in outpatient settings, such as post-traumatic stress disorder (Cigrang et al., 2017).

As the modern medical system continues to advance towards preventative health care, an increasing number of medical establishments are integrating providers from differing disciplines into their practices to address the multiple needs of their diverse patient population. This has led to a significant increase in the need for psychologists trained in the specialization of health psychology, which makes health psychology one of the fastest growing psychology specializations in our field (Kaplan, 2009). Research indicates that the effective integration of many disciplines in medical settings improves patient's healthcare outcomes through the process of interpersonal collaboration, which has been found to be true both inside and outside of the United States (Martin et al., 2014; Wahass, 2005; Zwarestein et al., 2009).

Though the specifics of why interdisciplinary health care systems are effective are less well known, it has been established that the use of interdisciplinary health care teams

improves on the cost and the quality of services implemented (Rozensky, 2014). The integration of multidisciplinary teams in traditional health care settings has been found across multiple studies to improve patient outcomes through shortening patients' length of stay, decreasing re-admission rates, decreasing medical errors, and improving interdisciplinary team communication (Derrick, 2018). Interdisciplinary health care effectiveness has been established with patients' improved health outcomes, both within hospitals and primary care settings, providing preventative care that addresses patient's medical and mental health needs.

Meeting the behavioral and mental health needs of patients has been the responsibility of medical providers prior to the integration of psychologists into medical settings. The integration of psychologists onto interdisciplinary medical teams effectively reduces readmission rates of hospitalized patients (Benjenk & Chen, 2018). Research findings for mental health integration suggest the implementation of mental health resources during and immediately following a medical hospitalization can improve patients' physical health outcomes, which even includes readmission due to physical conditions related to heart disease (Huffman et al., 2017). Lower rates of readmission are an important outcome, as it eases the burden of a taxed medical system.

The implementation of psychologists into medical settings also provides the opportunity to address a key contributor to physician burn-out, which is a lack of support by colleagues (Patel et al., 2018). In a national survey, 62% of physicians are only able to spend on average between 13 to 24 minutes with each patient they see; this research indicates there is not adequate time for the use of behavioral interventions in medical providers' clinical work (Meadows et al., 2011; Michas, 2019). Psychologists on

interdisciplinary teams can fill the role of support through psychological maintenance of both patients and providers. The need to support health care providers is ever pertinent within the context of the global pandemic, SARS-CoV-2 (COVID-19) (Kanzler & Ogbeide, 2020). Research indicates providers exposed to trauma related to the medical care of COVID-19 positive patients, are at a higher risk of developing poor mental health outcomes (Lai et al., 2020).

Integrating psychologists into medical and primary care settings could also improve access to adult patients who are at a higher risk for completing suicide. Research indicates approximately 45% of adults that complete suicide saw their primary care provider within the last month, while only 20% of that same group had seen a mental health provider within that time (Raue et al., 2014). Additionally, a longitudinal study showed 83% of adults who completed suicide received health care services of some kind within the year prior to their death (Ahmedani et al., 2014). The higher rate of attendance to appointments in medical setting when compared to the utilization of specialized services of mental health providers indicates a potential opportunity for suicide prevention through the integration of psychologists within all medical settings, including but not limited to primary care.

The breadth of use for psychologists within interdisciplinary medical teams is wide, though the continued difficulties integrating psychologists onto these teams have been made prominent in the research community. Difficulties in integration of psychologists appear to stem from the cost and lack of understanding of what services psychologists can provide (Grenier et al., 2008). For psychologists to continue to fully integrate their profession into medical systems, these barriers need to be further clarified and addressed.

Equitable Access to All Care

At the turn of the 21st century, the push towards integrating health psychologists into medical settings and primary care teams allowed health organizations to better address the behavioral health needs of their patient populations (Hoffses et al., 2017; Vogel et al., 2012). Psychological services provided within medical settings would go unaddressed by patients outside of those interdisciplinary health environments; this is often due to a lack of access to care, which is frequently in-correlation with many psycho-social factors (Dowrick et al., 2009). Providing the option of psychological services within interdisciplinary medical settings improves access to care across the population, particularly within marginalized populations (Kearney et al., 2020). Research indicates that in settings where access to medical and mental health care is limited, individuals from marginalized ethnic and racial backgrounds are experiencing an increased rate of unaddressed mental health diagnoses, such as depression (Hudson et al., 2016). These findings indicate vulnerable populations are receiving mental health care at a disproportionately lower rate due to a lack of access to mental health providers.

Individuals with marginalized identities are also often at a higher risk of poorer health outcomes, which has been linked to social determinants of health (i.e. access to healthful foods, walkability of neighborhood, access to recreation areas) (Artiga & Hinton, 2019; Braveman & Gottlieb, 2014). There is a common misconception about poorer health outcomes in marginalized populations being attributed to a lack of access to medical care; this is a fallacy can lead to an overfunding of medical systems (i.e. hospitals, primary care clinics) that do not always incorporate a holistic view of their patients' life-style factors and the reality of their social determinants of health into their

conceptualization of the patients' health outcomes (Fiscella & Holt, 2007; Lindsay et al., 2014). The role of mental health providers working within medical systems serving marginalized populations has been to vocalize and support a deeper understanding of how these social determinants influence individual patient outcomes.

Psychologists in health-related specialties fill the gap in the current medical system to incorporate knowledge about social determinants of health outcomes into their conceptualizations and treatment, while simultaneously communicating those factors to all members of the interdisciplinary team to better address the needs of marginalized individuals. The integration of psychological services into interdisciplinary primary care clinics increases patient advocacy through the opportunity to access care, which could address and even alter negative health outcomes related to factors of social disparities (Shi, 2012). Therefore, the inclusion of psychologists on interdisciplinary teams may begin to address the socially fueled disparities in health care.

Interdisciplinary Training for Psychologists

With the growing need for integration of psychologists into medical systems, a lack of adequate training opportunities to meet the growing need of this expanding field has created a workforce crisis (Blount & Miller, 2009). Standards for clinical competency within the field of interdisciplinary and health psychology work indicates supervisors of unlicensed providers and trainees should stay up to date on recent literature regarding the field of health psychology, should be providing live supervision to supervisees within interdisciplinary health settings, and should act as gatekeepers to the health psychology specialty (APA, 2015). The specialty area of health psychology requires skills in mental health triage and interdisciplinary consultation to a capacity that is often not trained

within general clinical practice (Haley et al., 1998; Tovian, 2006). It is the author's assertion that the introduction of these skills should occur early in the training of doctoral psychology students pursuing interdisciplinary medical system work.

Supervision and training of psychologists within the field of health psychology is often individualized to meet the developmental needs of the trainees. Limited research has been conducted on the use of specific models for supervising doctoral level psychology students within interdisciplinary team settings. One emerging component of supervision within the field of health psychology is the continuous presence and in-session supervision provided by a licensed psychologist (Mancini, Wicoff & Stancin, 2019). Live supervision to meet the developmental needs of a trainee specializing within health psychology adapts the outdated 'see one, do one, teach one' model that does not support effective training within the field of psychology (Gorrindo & Beresin, 2015). Live supervision incorporates learning through modeling without the premature loss of guidance that occurs in the original medical model of training. Newer models of clinical training in health psychology allow for adequate supervision that could meet earlier developmental needs of trainees.

The concept of introducing pre-doctoral level psychology students into interdisciplinary clinical work prior to their internship year has been established for decades as a beneficial trajectory for the training of the next generation of clinical practitioners (Glueck, 2015; Talen, Fraser & Cauley, 2002). The introduction of early training psychologists into interdisciplinary and medical settings also allows for the opportunity of greater systemic level understanding of how mental health providers operate, and the services they can provide, on medical teams (Robinson et al., 2018). It

has also been established that the increasing number of health psychology training opportunities for psychology interns and post-doctoral fellows allow for further specialization and mentorship within the field of health psychology (McQuaid & McCutcheon, 2018; Silberbogen et al., 2018; Vogel et al., 2012). An increase in opportunities for mentorship within these settings is especially important in helping new providers learn to navigate interdisciplinary work and develop into self-sustaining clinicians (Cobb et al., 2017). Though the opportunity for mentorship outside of higher-level, formal, and specialized training settings appears to be limited, even in the context of doctoral level clinical psychology training (Johnson et al., 2000).

The limitations in mentorship and training opportunities within the specialization of health psychology have been attributed to differing causes in recent literature. Though largely the limitations in training opportunities within health psychology are attributed to the lack of training options for pre-doctoral level practicum students, as much of the research base only tracks internship and post-doctoral fellowship training as the earliest point of clinical specialization (Callahan & Watkins, 2018; Van Allen, Littlefield & Schmidt, 2018). This disconnect may lead clinicians to pursue other avenues of clinical practice, as the first three to four years of clinical work is not occurring within interdisciplinary medical settings.

Some medical and academic institutes have begun creating and disseminating training opportunities to meet the needs of the growing workforce (Blount & Miller, 2009; Bluestein & Cubic, 2009; McDaniel et al., 2002). Additionally, measures to assess preparedness in integrated mental health care work have been established to ensure adequate training of psychologists is occurring in primary care settings (Blaney et al.,

2018). These changes are aimed at addressing the gap in behavioral medicine training that exists for most mental health generalists. The goal of the current research is to develop a better understanding of the complex barriers potentially impacting psychologists from integrating into interdisciplinary medical settings at earlier points in their training.

Methodology

The following research was conducted through a structured interview of licensed psychologists with expertise due to clinical experience operating on interdisciplinary medical teams (see **Appendix A**). The responses from those interviews underwent a qualitative analysis that identified common themes among each provider's responses to each area of questioning. For the purposes of this research, specific details of the training and roles of the professionals interviewed have been omitted to maintain confidentiality and allow providers the freedom to respond openly.

Prior to initiating the interviews detailed in this paper, a Human Subjects Research Determination form was submitted to the University of Denver's Institutional Review Board (IRB). The University of Denver's IRB determined that this proposed ethnographic project does not qualify as human subjects' research. A letter of determination from the IRB was obtained authorizing the ethical completion of this project prior to conducting any interviews.[1]

The recruitment of the professionals in the field of psychology was done by identifying providers who are licensed psychologists in the United States currently or

[1]Proof of IRB documentation can be reviewed upon request through the University of Denver's IRB or through the direct contact of this author.

recently practicing in the environments of interdisciplinary teams, medical settings, and primary care clinics. An email was composed that briefly detailed the purpose of this study and requested voluntary participation in an hour-long virtual interview. The email was then sent to ten providers meeting the criteria outlined above. Four of the providers responded to this outreach, and three providers completed the interview.

The interviews were conducted virtually via Zoom. It is important to note that the Zoom video call sessions were locked to prohibit additional participant's entry during the interview. Additionally, all providers gave their verbal consent at the start of the session to participate in the interview and to have the interview recorded for transcription and qualitative analysis purposes. All copies of transcripts have been de-identified and password-protected while electronically stored with the goal of maintaining the interviewees' confidentiality.

The areas of questioning included Provider's Training and Identification, Pre-Doctoral Student Training, and Integration, Systemic and Structural Influence, and Recommendations for Initiating Change. Additionally, data from two interviews also provided information on the impact COVID-19 has had on training within this field; the third interviewee did not respond to these questions as they are not currently operating in a supervisory role and cannot answer due to lack of relevance. Finally, all three interviewers provided information on other psychologists with experience on interdisciplinary teams who might be open to participating in this project. All providers recommended during the interviews were contacted using the same structured recruitment email.

The analysis was conducted by the interviewer following the completion of all interviews. All interview question responses were consolidated and analyzed during the same period to identify commonalities between responses and key differences that may be attributable to the providers' differences in training and experience. Questions with only one response, due to lack of relevant experience, were only incorporated when the themes in those responses related to themes identified by more than one interviewee in other question responses. The information detailed below in the *Interview Findings* section was completed through the identification and incorporation of frequently-used words or themes across responses, a consolidation of these themes within the context of relevant professional literature, and the objectively subjective lens of this author's own interpretation.

Limitations

The findings in this ethnographic study should be interpreted within the context with which they were obtained. There are three limitations to this study that are relevant for readers to consider. The limitations of these findings include the following: the demographic similarities of the interviewees, the limited number of interviewees, and the potential biases that would lead an interviewee to self-selecting into participating in this research project.

The three psychologists who volunteered to participate in this study all identify as white women. It is important to consider that because they share similar gender and racial identities their responses could be similar in areas because of their shared demographic identities. Research indicates the experiences of female providers in medical settings differ from their male counterparts, specifically in the areas of employment opportunity,

salary, respect, and rank (Black & Holden, 1998; Robinson & Cannon, 2005; Williams, Wedding, & Kohout, 2000). A study completed with psychologists within medical settings indicated men had, "more favorable employment circumstances and higher base salaries than their female counterparts" (Williams et al., 2000). Given that women experience lower base salary rates compared to men in similar professional roles, the respondents in this study might have been more inclined to discuss financial components of their professional roles as a barrier to their responsibilities as providers. Further research should be conducted which incorporates male psychologists into the interview process to determine if the financial concerns determined as a theme in this project are influenced by the experiences of the respondent group's shared gender identity. It's also relevant to recognize that psychologists from other marginalized identifies (e.g. race, ethnicity, etc.) may face additional barriers to equal pay and discrimination in the workplace that is not captured in the current scope of literature.

Female psychologists within medical settings also report an overall lower level of respect from their colleagues when compared to their male peers (Black & Holden, 1998). Respect is a challenging variable to define, but for the purposes of this project, further research should include questions pertaining to one's perceived level of respect within medical settings, along with examples of high and low respect level experiences to better define this variable term. Finally, women typically fill a lower percentage of higher-level roles in medical settings, which can result in a lack of effective communication across genders in mentor relationship (Robinson & Cannon, 2005). The current project would benefit from future research regarding the gender identities of interviewee's training supervisors, along with their perceived effectiveness at

communicating with those supervisors. The lack of gender diversity in the interviewees limits the ability to compare an accurate representation for perception of experiences within medical setting psychologists. Similarly, the lack of racial diversity in the interviewees creates concern regarding the accuracy of representation for diverse psychologists' perception and experience within medical settings.

Currently, there are no publications documenting the experiences of psychologists, who identify as a marginalized racial or ethnic identity, working in medical settings; this is an illustration of the similar difficulties faced with recruiting such providers for the purposes of this project. The lack of diverse racial and ethnic representation in this project does a disservice to all providers, especially those with marginalized racial identities, and is a component of the continued perpetuation of systemic racism which exists within modern medical settings. Future research should prioritize recruitment of racially and ethnically diverse psychologists within medical settings to begin filling this gap in current literature.

Additionally, the diversification of responses to capture a perspective during qualitative research is a key component of strengthening the validity of the data collected (Marrow & Smith, 2000). Though there is no clearly defined number of required participants to conduct qualitative research, this project is limited by the small number of experts who completed interviews. The minimal number of interviewees, three, combined with the commonalities in their demographic information limits the findings of this research to only be incorporating the perspective of their shared identities. More specifically, the following data can only be interpreted as the perspective of white female psychologists working on interdisciplinary teams. It is also important to note that the

qualitative review is also conducted by a white female, further limiting the scope of interpretation through continued shared identities.

The final limitation regarding the findings of this research are potential biases of the providers who self-selected to participate in the interviews. Specifically, the psychologists who agreed to participate in this research are all currently working in some capacity within the field of academia. While most psychologists who were extended an offer to participate in this research were providers currently working in medical settings, only one of those psychologists responded to the initial inquire to participate in the interview, and this psychologist unfortunately did not follow through with the interview process.

Given that the interviewees who self-selected to participate in this research all currently work within the field of academia, they potentially had more flexibility in their work schedules to participate in the interview process required for this research. While all providers interviewed have a history of working on interdisciplinary or medical teams, none are currently employed full-time in a medical or interdisciplinary team setting. Therefore, it is important to consider the potential biases of providers who have either chosen to leave, or not engage in, a full-time career within a hospital or primary care setting. Further research should include psychologists currently working full-time in medical settings, as the current limitations of this study lead to potential biases of the academia-based providers that self-selected to participate in this research project.

Interview Findings

The following results are presented in the order of the structured interview questions. The information is grouped into categories based on commonalities between

interview questions. Each subcategory is a theme identified by the experts interviewed. The "Professional Experience and Academic Training" section below conflates the experiences and training of all three expert providers for anonymity of their individual identities.

Professional Experience and Academic Training:

The three experts all come from different academic and training backgrounds. Two experts have a Doctorate of Philosophy (PhD) in Counseling Psychology and one expert has a Doctorate of Psychology (PsyD) in Clinical Psychology. The experts have training in counseling psychology settings, with the integration of later training in psycho-oncology, women's health hospital clinics, primary care clinics, and a VA (Veterans Affairs) medical center. Currently, two of the experts work in graduate level academia, and one expert works primarily in private practice while providing mental health consultation and training to hospitalists. Only one of the experts reported a history of training on interdisciplinary teams prior to their internship training year. It is important to note that these experts come from a diverse academic and professional training background, which allows for a diverse perspective on doctoral level psychology training within interdisciplinary team settings.

Psychologists' Roles on Interdisciplinary Teams:

Outreach. All experts spoke in some capacity about psychologists on interdisciplinary teams filling the role of mental health providers meeting the psychological, emotional, and behavioral needs to patients who would otherwise not seek out, or have access to, mental health care. Two of the experts specifically spoke about the potential social justice implications of providing mental health resources to under-served

communities, which in turn affords individuals from marginalized identities similar opportunities for access to behavioral and mental health resources. The importance of these opportunities exists in the equitable access of multidisciplinary medical care that is not often afforded to individuals from marginalized racial, ethnic, and socio-economic statuses. The integration of mental health providers within interdisciplinary teams is done by these experts with the awareness that without their presence on medical teams, patients' mental and behavioral health needs would go unaddressed, especially for patients with marginalized identities. One expert stated, "many patients who won't take referrals for outpatient mental health could finally get the care they needed…even preventative care." A psychologist's role is not only to treat significant mental health concerns, but to identify and address potential mental health related issues prior to their intensification.

Leadership. Two of the experts discussed the role of psychologists within the context of leadership. The concept of leadership as a role of a psychologist was broken down into two significantly differing components. One expert noted that the psychologist's responsibilities as a leader is to, "fill their role as a mental health expert," while, "…accepting that we are never going to be leaders…because [we] are not physicians." This expert stated their belief that a psychologist presents as a leader due to their expert level of knowledge, but that this perception of leadership cannot expand past the boundaries of their field of mental health. Another expert's reference to leadership as a psychologist's role within hospital settings was related to the perceived ability for psychologist's awareness and knowledge of navigating group dynamics. The expert spoke to the system's level training received in a doctoral level degree program in

psychology and how this is a necessary skill within leadership. While both experts spoke of the role of leadership as being a crucial component of a psychologist's identity on interdisciplinary teams, there was question of how medical systems can undermine the role of mental health within the context of patient care. Therefore, it can be difficult for psychologists to reach influential leadership positions outside of the mental health realm, with one expert being quoted as saying, "Psychologists can play an important leadership role, but only if allowed to do so." This suggests the structure of each individual medical setting is crucial in identifying the psychologist's role.

Ill-defined. The role of psychologists within medical settings appears to create a wide array of responses based on the variance in information provided by the experts interviewed for the purposes of this project. One expert attributed a large amount of this variance potentially due to a lack of definition or clear expectations of the role of psychologists within interdisciplinary medical systems. This expert commented, "We haven't differentiated ourselves from other master's level providers in a way that the system finds us worthy of hiring." These comments were paralleled further down the cause-and-effect line of this comment by the other two experts' own perceptions that psychologists are undervalued and underutilized within medical systems. This cause and effect of devaluing appears in additional detail in the sections below, though it is important to note the source of this devaluing process of psychologists is occurring at least partially because of poorly defined roles and differentiation of psychologists from other mental health providers within medical teams.

Training and Integration of Pre-Doctoral Students into Medical Settings:

Specialization. When openly prompted for their opinions of training pre-doctoral level students on interdisciplinary teams, all experts referenced the need for trainees' specialization of health psychology. All three experts noted the increased level of medical knowledge required to be successful in this field, but that this specialization is often challenging to find outside of a doctoral program that is advertised as a health psychology program. One expert described an effective psychologist in this setting needs both generalized training and health psychology specialization, but these two training opportunities often only exist in isolation of one another. The lack of academic training in medical knowledge and interdisciplinary teamwork noted by all three experts created a split between what is perceived to be the most effective way to train students. One expert stated, "students get the best training by just being thrown in and having the curiosity to learn." This suggests that the current system of training pre-doctoral level psychologists in interdisciplinary teamwork is not set up to support the training of the next generation of mental health providers and instead the responsibility is left to the trainees themselves. The expectation is that psychology students either fail or thrive based off their innate ability, not because of training or support one might expect should come from a doctoral level degree. On the other side of the divide, one expert noted training pre-doctoral level students within interdisciplinary teams is, "not the best setting…knowing how many basic skills need to be developed, and how much knowledge needs to be developed before you throw someone into the pit of primary care." While the experts appeared divided on whether training in interdisciplinary health related settings was the best developmental option for pre-doctoral psychology students, all experts acknowledge there is a significant gap in the background training needed for specialization within this

line of work. The lack of interdisciplinary health focused academic training in psychology makes it difficult to learn the language needed to communicate with other providers from different training backgrounds.

Capability & Confidence. As reported consistently by all three experts, given psychologist's responsibilities and roles differ within interdisciplinary teams, it appeared crucial that pre-doctoral level trainees have adequate capability to manage these responsibilities. One expert outlined these responsibilities as follows, "Being able to assess and quickly diagnose a patient, provide brief interventions, and execute a short-term model without a lot of oversight in a super busy clinic. And at the same time be multitasking and responding to multiple requests from a group of 30 physicians…an extremely chaotic environment." This expert determined that experience and confidence are both needed to be successful in training within an interdisciplinary environment. It is important to note that this provider also elaborated they, "…never quite felt comfortable with a doctoral student in that role." The providers were also divided on the appropriateness of allowing pre-doctoral level students to train within interdisciplinary teams. While two experts advocated for training students within these settings early in their careers, the third expert believes that the level of expertise needed to be successful as a mental health provider within interdisciplinary teams can only come with training and time spent outside of medical environments. Finally, all three experts alluded to pre-doctoral level trainees needing to evoke the characteristic of "confidence" while working within a medical environment, as working with interdisciplinary team members can be "intimidating." This means that a pre-doctoral trainee's capabilities may be determined outwardly by the confidence they are presenting to providers from other disciplines.

Financial burdens. Overwhelmingly, all three experts discussed the role money plays in the training of pre-doctoral level students and the employment of psychologists in interdisciplinary teams and medical settings. One expert stated, "If they [for profit hospitals] don't have a long history of training and that altruistic piece of growing the young… it's not going to happen, because just to keep up with their own compliance issues for the medical world it's overwhelming." All three experts mentioned the training of pre-doctoral level psychology students was limited by the structural nature of the medical system. Another expert provided an example of difficulties inserting an already fully funded psychologist and pre-doctoral student into a hospital, with the goal of providing specialty mental health care and training within maternity clinics. The barriers in implementing this training opportunity for psychology students was the result of the hospital questioning the capability of these trainees and the inflexibility of their financial structure to allow for separately paid psychologists to exist and get paid in their institution. The example of this expert was braced by the other two experts, who commented on the difficulty for psychologists to receive adequate pay for their job in hospitals, which is captured in one expert's quote, "…the ability to bill for psychologists in an integrated medical setting is very, very limited." This undisputed perspective suggests that financial limitations are one of the largest barriers in implementing additional training opportunities for pre-doctoral psychology students.

<u>Systemic and Structural Influence:</u>

Undervalued. All three experts commented on the experience of being undervalued as mental health providers within medical systems. While two providers commented on the perception of mental health providers as being "extra…replaceable" or

"a nice bonus," all three experts stated most interdisciplinary settings view mental health providers as superfluous and needing to prove their worth to these systems, rather than being sought out. Although none of these experts could definitively say why mental health providers are often undervalued within interdisciplinary settings, one expert extrapolated that psychologists' lack of differentiation from other mental health providers (i.e., Licensed Professional Counselors, social workers) results in the belief that psychologists' credentials are not worth the cost of their services. Therefore, this undervaluing of psychologists could at least be in part due to psychologist's poor role definition within interdisciplinary teams. Poor role definition was also brought up by another expert, who stated, "we're still struggling with integration… I think it takes time for people in the hierarchical structure [medical system] to value what we bring as mental health professionals." This expert elaborated that because of a lack of integration, the role of a psychologist on a team is often ill-defined, and therefore undervalued until providers from other disciplines have direct exposure to the expertise of mental health offered by psychologists.

Finally, it is important to note that as a part of these interviews, all experts were asked to provide examples of times when their role of authority was salient to them within an interdisciplinary team. While all three experts were able to provide an example where they were in a position of authority within the hierarchical medical structure, each expert also cautioned that their role of authority was typically one where they had to "become confident enough to speak up" or their actions had to be done "behind the scenes…because [they] didn't really feel like the team would care what [they] were doing." Therefore, this suggests for a psychologist to fill an authority role within a

hierarchical medical system, they often must approach their actions from a place of subordination, which in turn continues to perpetuate the cycle of psychologists being undervalued within interdisciplinary teams. Overall, all three experts described experiencing their role as a psychologist as being undervalued members of their interdisciplinary team, which is partially attributable to poor role definition and differentiation of these providers.

Reactions and Reflections

> To develop an understanding of action in context, the researcher enters the social world of participants and spends significant time in the field absorbing the culture of interest…Immersion in the setting enables the researcher to form relationships with participants, frame interview questions that are relevant and understandable, give background from which to view subsequent data, and add complexity to the understanding of the phenomenon. (Morrow & Smith, 2000)

The development of this research project would never have occurred without my personal immersion into the specialty of training and working as a pre-doctoral level psychology graduate student in interdisciplinary medical settings. While my current training and experience has not afforded me the opportunity to operate as a health psychologist, given the stage of my training, my proximity to psychologists on interdisciplinary teams has provided me with the insight to expand the current body of research on psychologists' experiences in medical environments. Through this opportunity, I have been able to gain a deeper understanding of how they train the next generation of doctoral level health psychologists.

Overwhelmingly, the interviews of the experts suggest the current interdisciplinary setting and the field of psychology are not set up to train or support the next generation of psychologists to operate within their teams. It appears the largest barrier to this type of training is deeply rooted in poorly established roles of psychologists

within interdisciplinary healthcare teams and the resulting financial implications of this lack of information surrounding their roles. This suggests the key to change could be in the current information gap regarding psychologists' services, skills, and roles on interdisciplinary medical teams.

In economic theory, for *perfect market* to occur, all members of a market must receive *perfect information* about a product, which in turn will allow for a product to be appropriately valued and priced (Arrow & Debreu, 1954). In the case of the health care market, the product in this scenario is the psychologists themselves and the specialized services they offer. Given most providers operating in healthcare settings have had limited experience working with psychologists because of the separated training model for each differing health care discipline, it can be assumed medical providers are not aware of the capabilities of psychologists. Therefore, the undervaluing of psychologists, which each expert touched on throughout their interviews, could potentially be the result of a gap in the information of psychologists' roles and skill set within interdisciplinary contexts.

A long-established theory behind the goal of the modern medical system includes the idea that the medical system keeps its population sick, particularly those from marginalized identities, because only through sickness is there financial gain (Navarro, 1978). Psychologists' lack of advocacy for their own roles within the modern medical systems is a way mental health providers implicitly feed into this system of sickness. Until psychologists are able to explicitly define their role to those both inside and outside of the medical system, they will continue to aid and abide a medical system that inherently devalues their work and the ethical standards of psychological practice. This

concept is backed by the responses of each expert's interview by the continued clear identification of difficulties faced in psychologists' inability to act as leaders within the medical systems given their perceived lower rank. This lower rank is partially the result of poorly disseminated information on the vast capabilities and specialization of a psychologist.

When I thought about the contextual component of improving access to health care using primary care clinics for marginalized populations, I found myself struck by the parallel process occurring between the "undervalued" psychologist and the medical system compared to the marginalized and the medical system. Those under-represented and marginalized individuals have historically been undervalued by the medical system. The misunderstanding of the roles of psychologists parallels the misunderstanding of the needs of the marginalized. Given that the common misconception is that under-served populations need improvement to access of health care instead of addressing the system of inequity that results in poorer health outcomes, one could see how shedding further light on this misconception would not be in the best financial interest of medical institutions. In the same way, psychologists attempting to increase their value through a dissemination of accurate representation of their abilities within medical settings would appear to conflict with the financial goals of medical settings.

Overall, the findings of these expert interviews suggest that while psychologists have specialized training in understanding and intervening at both an individual and systemic level, they often will refrain from stepping up to this position of power. The lack of authority felt and reflected by each interdisciplinary psychologist interviewed also indicated feeling undervalued by the systems they operate in. The sense of being

undervalued is potentially a poor understanding of a psychologist's role within these settings. When psychologists' roles are poorly defined, they fall into a cycle of fiscal compensation that does not match that of their doctoral level peers practicing in the field of medicine. The limited compensation psychologists' experience reinforces a pattern of feeling undervalued, which further strengthens their subordinate role that keeps them undervalued from the start. For psychologists to begin changing this cycle, they must influence the only thing within their current realm of authority. They must provide clear information to others in their interdisciplinary team on the resources, skills, and specialization they bring to the medical field. Only then can the true value of a psychologist be recognized on interdisciplinary teams, and in turn create space to train the next generation of health psychologists.

Conclusion & Recommendations

When it comes to the field of psychology, the idea that there are environments where a deeper understanding of behavioral functioning is unnecessary speaks to a limited understanding of the value psychologists bring to any systems' level dynamic. The value of psychology in improving patient outcomes in medical settings has been well established and documented over time. When thinking about the future of the health psychology specialty, increasing awareness, and stepping outside of the silo of mental health will allow other disciplines to gain a better understanding of the expertise in the biopsychosocial model that psychologists communicate to a medical team. By going through the process of educating providers from all disciplines on the assessment and intervention skills of psychologists, they would inherently foster a need for their indispensable services on all medical teams. Only by further developing the modern

medical system's awareness of the skill set of psychologists will the value of training future providers in health psychology outweigh the perceived burden of implementing training opportunities for pre-doctoral level student trainees in health-care settings.

Based on the findings of this research, the main barriers that restrict pre-doctoral level trainees from accessing health psychology related training are financial. Psychologists need to address the issue of being undervalued, and as a result financially diminished, by clearly defining their role as a psychologist on an interdisciplinary medical team. Through more accurate role definition, a clearer set of expectations for providers from other disciplines will occur, and they will improve efficiency and satisfaction from the perspective of other providers for the services psychologists can provide as members of these interdisciplinary teams. As a result of this research, an example information sheet was created that lists information for medical providers on the skills and role of health psychologists (see **Appendix A**). This sheet can, and should, be adapted and distributed for the use of all psychologists working within medical interdisciplinary teams. Further research regarding physicians' misconceptions about the role of psychologists in medical settings would allow for the creation of informational sheets that may target and address those potential misconceptions.

Not surprisingly, but rather ironically given the discipline about which this paper is produced, the power for change and advocacy in psychology comes from effective communication. As psychologists, we often find ourselves guiding our patients towards stronger self-advocacy, improving self-esteem, and inheriting more effective styles of communication. As it turns out, at the root of the financial concerns related to the value of psychologists in the medical system, those same guiding principles are likely the exact

skills we should be implementing to facilitate change in how we are integrated into interdisciplinary teams. By speaking up and educating others on our role within medical settings, we in turn will allow for more opportunity for effective use of psychologists within those settings. The effective use of a psychologist's time will naturally facilitate an understanding of the value of psychologists' health related treatment skills; this value over time should translate into financial compensation and motivation for the system to train the next generation of providers. Effective communication should not only improve the esteem of psychologists, but model for the next generation of providers the importance of continuing to advocate for themselves, and their patients, in all interdisciplinary spaces.

Overall, the continued integration of psychologists onto interdisciplinary medical teams will allow for an increase in positive patient outcomes. Through the process of improving clarity of information about a psychologists' role on interdisciplinary teams, the system will hopefully begin to shift their understanding and use of psychologists on these teams. As a result, these systems will place more accurate value upon the services psychologists provide. By better defining psychologists' roles on these teams, the inherent value of psychologists should improve over time, which in turn will further incentivize medical systems to integrate and train the next generation of these providers. The key financial barrier of pre-doctoral level psychology training might be most strongly influenced by improved dissemination of information regarding the skills provided, and benefits offered, through deeply integrating psychologists onto interdisciplinary teams.

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Appendix A
Structured Interview Questions for Interdisciplinary Psychologists

Provider's Training and Identification:

1. What race, ethnicity, and gender do you identify as?
2. Tell me about your current professional role and a brief overview of your professional training. [Probing question: what population(s) has/have you worked with? What is your primary area of interest in your clinical work?]
    a. Discuss your current or previous professional connections you have working specifically within an integrated primary care or interdisciplinary hospital settings. [Probing question: can you follow up on your IPC or interdisciplinary experience in more detail?]
    b. What formal training do you have, if any, in primary care and interdisciplinary behavioral health work prior to working as a psychologist in that setting?
    c. What led you to pursuing your position in IPC or interdisciplinary team experience?
3. In your opinion, what are the benefits of having psychologists in IPC settings? [Follow up clarification in the following areas: community/patients, other providers, the psychologists themselves.]
4. What, if anything, has made you leave, or want to leave the IPC system?

Pre-Doctoral Student Training and Integration:

5. What experience have you had in training or supervising pre-doctoral level students in IPC or interdisciplinary medical setting?
    a. Do you have experience training internship or post-doctoral level trainees in these setting?
        i. If yes- what were the major differences you noticed between training individuals from these different experience levels?
6. What barriers, if any, have you faced in implementing training opportunities for pre-doctoral level students in these settings?
    a. In your opinion, what changes would need to take place to reduce or remove those barriers?
7. What is your supervision model/methodology in supervising pre-doctoral student in IPC/interdisciplinary settings?
8. In your opinion, what benefits come with training pre-doctoral level students in IPC/interdisciplinary settings? [Redirecting question: tell me about training benefits that are specific to both the setting and the student.]
9. What skills or competencies, if any, do you believe are developed solely in IPC and medical settings?
    a. *Use as additional prompt as needed for interviewee clarification* - What if any skills do you believe pre-doctoral level students should prioritize in developing within IPC settings?
10. What limitations have you noticed exist in training students at pre-doctoral level?
11. What are the disadvantages to any students who doesn't have IPC or interdisciplinary pre-doctoral training?

12. How do you approach training your students in concepts that are central to structural competency within interdisciplinary and medical settings? [Provide e.g. if prompted (e.g., structural inequity, structural racism, structural stigma)]

Systemic and Structural Influence:

13. Tell me about an IPC or interdisciplinary team experience you have had where your role of **authority** in that setting became salient to you.
    a. How do you think that experience impacted or played into the hierarchical structure of the setting you were in?
14. Tell me about an IPC or interdisciplinary team experience you have had where a **subordinate** identity you held became salient to you.
    a. How do you think that experience impacted or played into the hierarchical structure of the setting you were in?
15. What systemically has gotten or continues to get in the way of your ability to care for your patients in IPC or interdisciplinary team settings?
16. How has the systemic level structure of your IPC or interdisciplinary settings impacted your student's training and development?
17. Research on disparities in health and health care indicates that social, economic, and political factors are key drivers of poor health outcomes. Yet the role of such structural forces on health and health care has been incorporated unevenly into provider training. Does your health care setting include any structural competency frameworks that offer a paradigm for training health professionals to recognize and respond to the impact of these structural factors on patient health and the health care system?
    a. If no – would you think this is important? How would you recommend integrating this training into your IPC or interdisciplinary setting?
    b. If yes – how has it impacted your work? How have you seen it impact your patients?
18. In your opinion, what leads to behavioral health provider attritions from IPC and medical settings?
19. In what ways do primary care and health teams perceive and respond to the morally conflicting events they encounter in their work?
    a. Moral injury is an injury to an individual's moral conscience and values resulting from an act of perceived moral transgression, which can sometimes lead to feelings of guilt, shame, and anger. How can moral injury theory make sense of the morally conflicting events you have encountered in your work?

COVID-19 Impact:

20. The recent pandemic has significantly impacted how medical systems function, how did COVID-19 impact your work and your teams?
    a. *If not in the space anymore* – What have you heard about any impacts on health professionals and trainees during COVID-19 (prompt e.g. if needed- the surge of resident and med student suicides)
21. *If currently working on interdisciplinary team* – How has working in the IPC or medical setting during COVID-19 impacted your mental health?
22. In what ways did you see COVID-19 impacting your patients and patient care?
23. How did training students change in your setting as a result of COVID-19?

a. Are those changes still the current practice in your setting?

Recommendations for Initiating Change:

24. Thinking big picture, what two or three recommendations would you make to your IPC or interdisciplinary setting?
25. Is there anything else that you'd like to add that I didn't ask about that you think is relevant for me to know?
26. Are there one or two other individuals in the field that you think would be helpful for me to talk to?

Template for Information Sheet on Health Psychologists

Diagnoses & Presenting Concerns:

- Mood changes (e.g. depression, anxiety, irritability)
- Suicidality
- Suspected challenges in functioning due to trauma (e.g. PTSD)
- Sleep disturbance & nightmares
- Potential learning disabilities (e.g. ADHD)
- Encephalopathy & changes in cognitive status – thinking and memory concerns
- Changes in functioning following pregnancy/birth (e.g. post-partum depression and anxiety)
- Concerns regarding compliance with medication as prescribed
- Suspected substance use concerns (e.g. tobacco, alcohol, opioids)
- Chronic pain
- Weight management

Services Provided:

- Assessment of suspected psychological diagnoses
- Consultation with providers about emotional and cognitive concerns of patients
- Motivational enhancement for medical compliance
- Brief Behavioral Treatment for Insomnia (BBTI)
- Brief PE and condensed Cognitive Processing Therapy (CPT)
- Behavioral interventions for symptoms related to depression or anxiety
- Emotional support for patients throughout hospitalizations
- Couple & family support
- Addressing interdisciplinary communication concerns
- Supporting health care providers mental and emotional needs

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